

The American Economic Review

VOLUME V, NO. 3

SEPTEMBER, 1915

BOARD OF EDITORS

J. L. COULTER
H. J. DAVENPORT

OLIVE DAY
F. A. FETTER

H. B. GARDNER
H. E. MILLS

MANAGING EDITOR

DAVIS R. DEWEY

The Crisis of 1914 in the United States	O. M. W. SPRAGUE	400
The Tariff and the Ultimate Consumer	HENRY C. EMERY	534
Amalgamation of Related Trades in Unions	THEODORE W. GLOCKER	554
Reviews and Titles of New Books		570
(For complete list of books, see second page of cover)		
Documents, Reports, and Legislation		652
Factors in Marketing Farm Products	WILLIAM R. CAMP	652
Water Terminals and Water Competition	ABRAHAM BERGLUND	657
Workmen's Compensation Acts of 1915	WILLARD C. FISHER	671
Investigations of Fire Insurance Companies	W. F. GEPHART	679
Census Report on Occupations: A Reply	ALBA M. EDWARDS	683
Estimated Valuation of National Wealth		
Periodicals		
Notes		

GENERAL LIBRARY
AUG 27 1915
711
UNIV. OF MICH.

Publication Office: Princeton, N. J.

Subscriptions: American Economic Association, Ithaca, N. Y.

Editorial Office: 491 Boylston Street, Boston, Mass.

Entered at the Post Office, Princeton, N. J., as second-class mail matter

Copyright, 1915, by American Economic Association.

Price, in paper \$1.25

General Works, Theory and Its History

Book Reviews

ELY, <i>Property and Contract</i> , by J. H. Underwood.....	576
WATKINS, <i>Welfare as an Economic Quantity</i> , by G. C. Cox.....	578
CLARKE, <i>Text-Book on National Economy</i> ; MASON, <i>Primer of Political Economy</i> ; MAJOR, <i>Applied Economics</i> , by F. W. Sanders.....	581
Titles of New Books	583

Economic History and Geography

Book Reviews

GOULD, <i>Money and Transportation in Maryland in 1720-1765</i> , by B. C. Steiner.....	584
MAJOR, <i>An Economic History of Russia</i> , by S. B. Fay.....	586
RAPPARD, <i>La Révolution Industrielle</i> , by W. P. Hall.....	589
HARRIS, <i>Intervention and Colonization in Africa</i> , by C. H. Levermore.....	592
BARTHOLOMEW, <i>A School Economic Atlas</i> , by A. L. Bishop.....	593
DEWITT, <i>The Progressive Movement</i> , by F. A. Dewey.....	594
LIPPINCOTT, <i>A History of Manufactures in the Ohio Valley to the year 1860</i> , by E. L. Bogart.....	595
SWAIN, <i>Conservation of Water by Storage</i> , by C. W. Wassam.....	596
Titles of New Books	597
Periodical Abstracts: <i>History</i> , by E. L. Bogart and C. Day.....	593
<i>Geography</i>	595

Agriculture, Mining, Forestry, and Fisheries

Book Reviews

JONES, <i>Anthracite Coal Combination in U. S.</i> , by G. O. Virtue.....	597
Titles of New Books	600
Documents, Reports, and Legislation	652
<i>Factors in Marketing of Farm Products</i> , by W. R. Camp.....	652
Periodical Abstracts: <i>Agricultural Economics</i> , by J. L. Coulter.....	695

Manufacturing Industries

Titles of New Books	601
----------------------------------	-----

Transportation and Communication

Book Reviews

COLSON, <i>Railway Rates and Traffic</i> , by H. G. Brown.....	601
HUTCHINSON, <i>Panama Canal and International Trade Competition</i> ; BAKENHUS, KNAPP, and JOHNSON, <i>Panama Canal</i> , by J. H. Gilbert..	603
Titles of New Books	605
Documents, Reports, and Legislation	665
<i>Water Terminals and Water Competition</i> , by A. Berglund.....	657
Periodical Abstracts: <i>Railways</i> , by J. H. Parmelee.....	700

Trade, Commerce, and Commercial Crises

Documents, Reports, and Legislation	652
<i>Office of Director of Markets in Idaho</i> , by A. W. Taylor.....	656
Periodical Abstracts: <i>Commerce</i> , by M. T. Copeland.....	697

Accounting, Investments, and the Exchanges

Book Reviews

COLE, <i>Accounts</i> , by R. H. Montgomery.....	606
HOOPER, <i>Railroad Accounting</i> , by A. M. Sakolski.....	608
Titles of New Books	610
Periodical Titles: <i>Accounting</i> , by M. J. Shugrue.....	708
<i>Investments</i> , by A. S. Dewing.....	712

(Continued on third page of cover)

The American Economic Review

VOL. V

SEPTEMBER, 1915

No. 3

THE CRISIS OF 1914 IN THE UNITED STATES

The world-wide crisis which came with the approach and outbreak of the European war presents widely different aspects even when its course in the various countries outside Europe at a distance from hostile operations is alone considered. Industry, commerce, and finance everywhere immediately felt the effects of the war influence but with varying degrees of severity and in diverse ways reflecting wide differences in the economic activities and financial position of different countries and parts of the world. At the outset, therefore, it should be clearly understood that this narrative of the course of events in the United States furnishes no indication, even of a most general sort, of the effects of the war elsewhere.

The crisis in the United States, unlike that in some other countries, Brazil and Canada, for example, was solely due to the war. It was not complicated and made more severe by the presence of unsound conditions developed during preceding years of general business and speculative activity—conditions which in some countries had already occasioned or made imminent the outbreak of a crisis. For more than a year before the war a moderate trade reaction in this country had checked new undertakings as well as purely speculative activities. As further and convincing evidence of the essential soundness of business conditions it is to be noted that although there was a large increase in the number of failures, the presence of widespread and deep-seated weakness was disclosed in strikingly few instances under the strain to which the country was subjected.

This condition of somewhat less than normal trade activity was reflected in the financial position of the New York money market during the first three weeks of July, 1914. Rates for loans of all maturities were at a moderate level and were tending to decline further. The weekly statement (computed on the average basis) of the total loans and investments of all the banks and trust companies of the city, as is customary after the half yearly settlements, exhibited the same downward tendency. Between July 3 and July 25 loans and investments were reduced from \$2,695,000,000 to \$2,631,000,000 and cash holdings which were at the lowest point at

\$507,000,000 on July 10 had increased to \$519,000,000. The surplus cash reserves of the clearing house banks, while not large, were of normal proportions, on July 25 amounting to \$26,000,000, not quite so great as at the corresponding date for the preceding year but somewhat greater than in 1912.¹ The customary midsummer tendencies were also to be observed in the course of foreign exchange rates. Owing to a pronounced decline in merchandise exports relative to imports and to sales of securities on foreign account, a factor intermittently present since the beginning of the Balkan Wars, there had been unusually heavy exports of gold during May and the first three weeks of June. Between June 23 and July 18, however, demand sterling, the most significant single exchange rate, had declined from \$4.8820, a level at which gold could be profitably exported, to \$4.8690. This decline, it is important to note, was not primarily due to a greater supply of exchange arising out of increased merchandise exports, but rather to exchange operations which involved borrowing in Europe in anticipation of the customary excess of exports during the autumn months. Grain bills were indeed already being offered in connection with the marketing of winter wheat, but as an excess of imports of \$6,000,000 was shown by the July foreign trade returns it is evident that the reversed exchange tendency could not have been due to an increase in the supply of commercial bills.

A large excess of exports in the near future was, however, reasonably certain, assuming the continuance of normal conditions. The winter wheat crop was of record-breaking proportions and the promise of the cotton crop was almost equally satisfactory. For both these products an extensive European demand was assured. In these circumstances so long as demand exchange was well above par the drawing of bankers' time bills, commonly known as finance bills, was by far the most attractive method of borrowing money in the New York market. There was a fair possibility that money

¹ A rather confusing variety of data is published each week by New York banks. Figures computed on the average basis are available for all the banks and trust companies of the city and on both the average and actual basis for the banks and trust companies which are members of the New York Clearing House. For many purposes the figures for the clearing house banks alone are to be preferred. They are available for a long series of years, while no trust companies were members until 1911. Moreover, owing to the practice on the part of both member and non-member trust companies of depositing surplus cash with the clearing house banks, it is these institutions that accumulate surplus cash reserves and it is from them that cash is withdrawn.

secured in this way would cost the borrower little or nothing. Early in July the quotation for bankers' 60-day bills ranged between \$4.8575 and \$4.86. If by September exchange should go to the import point, remittances to cover these bills at maturity could be secured at a rate low enough to take care of all of the charges incurred.

There is no means of determining the amount of bankers' long bills which were drawn during the first three weeks of July, but it is certain that they were the means of providing a considerable part of the supply of demand exchange which caused the downward tendency in rates. Those in New York who purchased the bankers' bills sold demand exchange against the discounted proceeds in the foreign markets on which the bills were drawn, chiefly London. No other course would have been reasonable because of the practical certainty of a further decline in rates with the approach of autumn. To hold the bills for investment or to build up foreign balances from the discounted proceeds of the bills would have involved an inevitable loss provided events should take the usual course during the remainder of the year.

On Saturday, July 18, when demand exchange had declined 130 points to 4.8690, it is certain that New York then possessed no considerable foreign balances against which exchange might be sold. Had normal midsummer conditions continued, regular remittance requirements during the following six weeks or more would doubtless have absorbed not only all the exchange created by merchandise exports but also a further amount made available through the drawing of additional finance bills. In other words, the New York market was in its usual midsummer position of indebtedness in the international short-time loan market. It possessed nothing with which to offset any sudden and unexpected foreign demands which might be made upon it. Although there was every reason to look for a further decline in exchange, anything that might increase the demand for exchange or prevent the drawing of finance bills was pretty certain to bring rates quickly back to the gold export point once more. But again it should be repeated, the New York money market was in this respect merely in what has always been its position relative to foreign markets in the early summer and, indeed, at all times in the year except during seasons of heavy grain and cotton exports.

On Monday, July 20, three days before the fateful Austrian note to Servia, discount rates advanced slightly in the continental

money markets. But as the advance was particularly noticeable in Paris it was attributed, and apparently rightly, to local causes of various kinds both political and financial. London exchange moved in favor of Paris, which took a part of the weekly offering of gold from South Africa. Although on Monday the advance in interest rates was slight, hardly more than $\frac{1}{8}$ of 1 per cent in any market, demand sterling in New York advanced 30 points to 4.8720. Some further easing of money rates in New York was in part responsible for this advance. The extent of the advance from these two influences is, however, significant. It shows clearly that the decline in exchange rates during preceding weeks was the result of the discounting of the expected future course of the market by means of exchange operations and was not due to the creation of large balances resulting from trade and other dealings having their origin outside the exchange market.

Each day following Monday, July 20, witnessed a further advance in exchange until on Thursday, July 23, with demand sterling at 4.8820, \$2,500,000 in gold bars was engaged for export to Paris. Rates declined slightly on Friday, but closed at the highest for the week on Saturday at 4.8830, when gold amounting to \$3,600,000 was engaged for export on the following Tuesday.

Up to this time nothing abnormal had developed in the working of the machinery of the foreign exchanges. Discount rates in European markets had been advanced but only to a slight extent, surprisingly little when judged in the light of future events. In London, for example, the discount rate on 60-day bills which on Monday was $2\frac{3}{16}$ per cent was on Friday $2\frac{1}{2}$ per cent. Bankers' time bills continued to be drawn freely, at least during the first half of the week, since the effect of the higher discount rates was more than offset by the advance in the rates of exchange. A normal supply of exchange seems to have been available during the week, but the demand for exchange had notably increased. In part this was due to the unexpected advance in exchange rates. When the tendency of rates is downward and is expected to continue in that direction a speculative short interest develops and many having remittances to make defer arrangements to the last moment. Covering of short commitments was therefore a factor tending to a further advance in rates just as soon as the initial advance was seen to be something more than a momentary fluctuation in rates.

By Thursday, the day of the presentation of the Austrian note to Servia, it seems to have become generally recognized that the

political situation in Europe was severely strained, but it was not apparently believed to be more alarming than on many other occasions in the past when matters were finally smoothed over. Sales of securities on the New York Stock Exchange on foreign account were being made and in increasing quantities day by day, but such sales had been taking place more or less intermittently since the outbreak of the Balkan Wars and therefore occasioned no serious concern. The volume of these sales to the close of the week was not great relative to the absorbing power of the New York security market, but was still sufficient in conjunction with the generally unfavorable influence on the market of the situation in Europe to bring about a moderate decline in the more active international stocks. In the foreign exchange market these sales were a more potent factor. The demand for sight exchange was increased by the amount of the sales at a time when, as we have seen, in the absence of bankers' bills, some gold would almost certainly have been exported merely to meet ordinary remittance requirements.

On Saturday, July 25, foreign exchange operations were still being conducted in normal fashion with demand exchange definitely at the gold export level closing at 4.8830. Gold exports on a considerable scale seemed likely, but nothing more serious seems to have been anticipated from what was known of the European situation. Over Sunday the outbreak of a general European war, which had been commonly regarded as a rather vague possibility, became alarmingly probable. On Monday demand exchange opened at 4.92 and the foreign exchange market was completely disorganized. This condition was in no way peculiar to New York. Foreign exchange dealings between all the money markets of the world were in a similar abnormal state. In no other business was the effect of the approach of the war felt so immediately, generally and severely. The complicated and delicately balanced mechanism of the foreign exchanges, developed during long years of peaceful intercourse, collapsed like a house of cards. It was not designed for the contingency of a general war and went to pieces the moment the outbreak became at all probable.

Two operations essential for the working of the foreign exchanges were interrupted and, indeed, practically discontinued on Monday—the business of accepting and that of discounting foreign bills of exchange in London. When London ceased to perform these two functions, the mechanism of the foreign exchanges

throughout the world inevitably and at once became completely disorganized.

* In order to understand the situation it is necessary at this point to interrupt the narrative of the crisis with a digression into some of the intricacies of foreign exchange operations. A large part of the foreign trade of the world and an even greater part of short-time international borrowing is handled by means of bills of exchange drawn for acceptance upon London banks and especially upon London accepting houses. Acceptors in London are constantly under heavy obligations on bills of exchange drawn by banks and merchants throughout the world who in turn are under obligation to remit funds to them before the bills mature. Among these bills accepted in the ordinary course of business were a large number amounting in the aggregate doubtless to many millions of pounds accepted for banks and merchants in the countries which were rapidly drifting towards war. If England engaged in the war, remittance would not be made on bills accepted for parties in hostile countries until after the restoration of peace. It was probable also that remittances would be at least delayed in many instances in the case of bills accepted for people in allied and also in neutral countries owing to the disturbance which the outbreak of the war would involve.

In these circumstances acceptors in London were in no position to make new acceptances and the value of the acceptance itself was impaired. It should further be noted that exchange banks in New York and in all other markets were under heavy contingent liabilities on account of endorsements of bills drawn on London acceptors. In the event of the failure of London accepting houses these bankers would have to supply funds to take up the bills and in the disturbed conditions prevailing might incur serious loss through the failure of drawers to whom of course they would have recourse. Uncertainty regarding the value of the London acceptance completely transformed the character of the business of buying commercial bills of exchange. A business which normally is highly secure and even routine in character was in a moment changed to one surrounded with uncertainties of a most unfamiliar and incalculable nature. At the same time shipping hazards and uncertainty as to market conditions in foreign countries were taking away much of the value of the security which the bill of lading ordinarily gives in the case of bills drawn against exports. Both exporters and those who might purchase their bills would there-

fore be embarking upon venturesome transactions utterly lacking the highly developed safeguards which normally protect international trade in commodities.

The consequences of the uncertain position in which London acceptors were placed by the approach of the war do not seem to have been at once fully realized even in foreign exchange circles. They were perhaps overshadowed by the presence of another disorganizing influence, the full force of which was immediate and obvious. From Monday, July 27, to the middle of August the business of discounting foreign bills in London was almost entirely suspended. London became the central money market of the world, reaping all the advantages of that position because it has always been able to absorb whatever amount of foreign bills might be sent thither for discount. This is an essential condition for the normal working of the exchanges under the existing system of settlements largely concentrated in a single market which in turn requires that bills of exchange shall be drawn on that market. The market on which bills of exchange are drawn must be prepared to discount them. Exchange bankers purchasing bills drawn on another country must be able to discount them at once in that country so that they may be in position to sell demand exchange against the proceeds. The price of long bills is always the demand rate less commission, stamp taxes, and the discount rate in the country on which the bills are drawn. If unable to discount the bills, the purchaser would be obliged to assume the risk of loss from a different demand rate of exchange at maturity. Suppose, for example, that 60-day commercial bills are purchased at 4.83 and that the demand rate is $4.86\frac{1}{2}$. The difference in the rates would cover the current discount rate in London, the English stamp tax, foreign correspondent's commission, and the dealer's profit. This profit he will secure by discounting the bill and selling demand exchange at once. If he should hold the bill to maturity his return would depend upon the demand rate of exchange at that time. If the demand rate has not changed in the meantime he secures, in addition to his initial profit, interest at the London rate of discount. If the demand rate drops his return is reduced while if it has advanced he makes an additional profit. Accordingly, when it is believed that exchange rates will advance bills may be held but when a decline is expected or when the future course of exchange is very uncertain the holding of bills drawn on another country is obviously inexpedient.

It is evident, therefore, that if time bills of exchange are to be handled with a minimum of risk, it must always be possible to discount them in the country on which they are drawn. This has always been possible in London and at rates which have averaged somewhat below those prevailing in other money markets. For this reason and because it facilitates settlements and makes possible a broad exchange market in all countries, foreign bills of exchange throughout the world have for many years been drawn principally on London.

Exchange bankers in New York, and in all other exchange markets, each day and oftener if rates change, receive spot and forward delivery discount quotations from London correspondents. Spot quotations, as the name implies, are discount rates on bills already in London. Forward delivery quotations are the rates at which London banks and discount houses agree to take bills arriving in the next mail leaving the market to which they are quoted. These forward delivery rates enable the New York exchange broker to purchase time bills without assuming any risk from changes in London discount rates during the week or more that the bills are in transit. When a downward tendency in London discount rates seems probable the banker may not take advantage of the delivery rate, just as in the belief that exchange rates are to advance he may decide to hold bills to maturity. In fact, the advantages and uses of forward delivery quotations are in every way analogous to those arising from discounting bills, which have already been described. In the one case the arrangement covers the transit period, in the other the entire life of the bill after it reaches the country on which it is drawn.

With the approach of the war it might well have been presumed that London would decline to quote forward delivery rates before the discounting of bills already in London was discontinued. As it happened, both spot and forward delivery quotations were discontinued at the same time, on Monday, July 27, striking evidence of the great change for the worse which affairs had taken over Sunday.²

This discontinuance of quotations by London was the most important single factor in the exchange market in New York and elsewhere throughout the world on Monday, July 27. It involved

² Spot quotations at the close of the previous week were $2\frac{1}{2}$ per cent for 60-day bills and $2\frac{11}{16}$ per cent for 90-day bills. Forward delivery rates were $2\frac{11}{16}$ per cent and $2\frac{13}{16}$ per cent for the same maturities.

a complete transformation not only of the business of buying commercial bills but also of conditions in the demand exchange market as well. On Saturday the exchange banker purchasing commercial bills could arrange discount terms at once in London and sell demand exchange against the proceeds. On Monday the purchase of such bills involved the investment of capital until the date of maturity in a far from satisfactory security owing to the position of London acceptors. On Saturday every commercial bill offered in the market provided the means for an immediate sale of demand exchange. On Monday the immediate supply of demand exchange could no longer be enlarged to the slightest extent by this means. The principal source of an immediate supply of a demand exchange was entirely cut off. Demand exchange could still be sold against foreign balances, but these, as we have seen, were not large. The exportation of gold was a further source of supply of demand exchange, but could not go on indefinitely without endangering the foundation of the domestic credit structure.

In these circumstances, although exchange transactions were not entirely suspended, there was a complete cessation of certain exchange operations, in the absence of which there can be no broad exchange market. Each dealer made every effort to provide the exchange urgently needed by regular customers but transactions between dealers were almost altogether discontinued. Ordinarily there are constant dealings in exchange between bankers. Each exchange banker is prepared to buy and sell both demand and time exchange in large amounts if the terms offered seem attractive. These dealings steady the market and enable each banker to adjust his position to changing conditions and to his purchases of commercial bills. Short sales of exchange are also essential, serving, when made within reasonable limits, to steady the market and to provide a more elastic supply of exchange. But with the approach of the war short sales were extra-hazardous and the few bankers who were fortunate enough to possess large foreign balances were naturally husbanding them to take care of their own future requirements and those of their regular customers. In normal times by offering to buy exchange at higher prices a dealer can secure whatever amount he may require. At such times changes in rates serve to adjust supply and demand in the exchange market. Beginning with Monday, July 27, rates merely reflected the urgent and even frantic efforts of particular purchasers to secure ex-

change. Rates fluctuated wildly, but as each transaction stood by itself they had no general market significance.

The supply of exchange could be increased only by means of gold exports, and, accordingly, gold was engaged for shipment in enormous quantities. On Monday \$7,000,000 and on Tuesday \$12,000,000 were taken for export, all that underwriters were willing to insure even at the high rates which were being exacted to cover war risks. These large gold shipments seem to have had at least the negative effect of preventing a further rise in rates on Monday and Tuesday. This means of providing demand exchange continued available until the beginning of the following week, but upon the declaration of war between England and Germany sailings were generally cancelled and insurance could not be obtained. Up to that time it is possible that these gold exports would have provided adequate exchange for urgent requirements but for the abnormally large demand for exchange created by the overwhelmingly large sales of securities by foreign holders on the New York Stock Exchange on Tuesday, July 28, and on the two following days.

These sales were by far the most striking consequence in the United States of the approach of the war. It is not, however, even yet generally realized that this was an effect of the war which was almost entirely absent in other non-European countries. With few exceptions the enterprises and government loans in non-European countries other than the United States, in which European capital has been invested, have been entirely financed by European investors. There is, consequently, no broad and organized market and generally no market at all for the securities of such enterprises in the countries in which the capital is actually invested. In the case of the United States, on the other hand, American investors have generally provided by far the greater part of the capital for those enterprises in which foreign capital has been placed. Furthermore, there is a broad and organized market on the stock exchanges of New York and other cities for the securities of all such enterprises of any great importance. When, therefore, at the approach of the war European security holders frantically endeavored to convert investments into cash, selling pressure was soon almost entirely concentrated upon American stocks and bonds. Other securities could only be sold to European purchasers, and such sales soon became impossible on account of the closing in quick succession during the first part of the week of the various

European exchanges.³ It may further be added that these sales between Europeans could have no direct effect upon the countries in which the capital was actually invested. The volume and urgency of the foreign selling of American securities on the New York Stock Exchange was accordingly far greater than it would have been if other non-European securities, owned in Europe, had been equally marketable.

Sales of securities by foreign holders on the New York Stock Exchange began with the first intimation of trouble between Austria and Servia, increasing in volume day by day. But even on Monday, July 27, they had not reached alarming proportions. Apparently, European security holders were unable on that day to complete the necessary arrangements for sales in New York. On the following day an extraordinary mass of selling orders was executed on the exchange. The volume of sales of shares as compared with Monday increased from 474,749 having a par value of \$41,552,000 to 1,019,975 with a par value of \$90,257,000. What proportion of these sales was on foreign account can not be determined. Uncertainty regarding the effect of the war on security values doubtless led to sales by American owners of securities, and there was also much short selling.

Notwithstanding a sharp decline in quotations on Tuesday, it seems to have been generally believed in New York that the absorbing power of the American market would be sufficient to take all the securities which European holders might desire to sell. This opinion was strengthened on Wednesday when, in spite of further foreign sales, quotations generally recovered slightly from the low level of Tuesday. It was, however, but a momentary respite due chiefly to the covering of the short sales of the preceding days. Owing to the inability of European investors to dispose of other securities, falling quotations for American securities could have little or no effect in checking sales. Thursday was marked by still more intense selling pressure than on Tuesday, accompanied by a further decline in security prices though it was not so extreme in the case of particular securities as on Tuesday. The decline was, however, more general, extending throughout the entire list of securities, including many ordinarily inactive issues of bonds.

³ On Monday the bourses of Vienna, Budapest, and Brussels, and on Tuesday the stock exchanges of Montreal and Toronto were closed, and business was suspended on the Paris Bourse. On Wednesday all the other bourses of Europe were either closed or had limited transactions to cash business.

It should be observed at this point that the disturbing effect of these sales was almost wholly due to the fact that they were sales by foreign holders rather than to the quantities offered for sale. Transfers of securities far greater in magnitude between domestic buyers and sellers have frequently taken place even when the tendency of prices has been downward without causing serious difficulties. Uncertainty as to the effect of the war on security values tended to reduce the investment demand to a minimum. But, after all, it is the speculative buyer who must be relied upon to purchase securities in large volume at a moment's notice in periods of stress. It is at least possible that the speculative demand might have proved adequate to absorb all the securities which foreign holders might have desired to sell if the effects of such sales had been in no way different from the sale of securities by domestic owners. Transfers of securities or other property from investors to speculative holders can take place upon a large scale only when the latter are able to borrow from banks a considerable part of the purchase price. When such transfers are between domestic buyers and sellers, although loans and deposits increase, it is unlikely that the banks will experience any appreciable change in their cash holdings. Analogous conditions are present when securities are sold on foreign account if the country in which the sales are made is in a creditor position in the short-time international loan market or is able to borrow in the market from which the securities are sold. Funds from these sources were, of course, unavailable for meeting the obligations immediately payable which were being created by the sale of securities by foreign holders on the New York Stock Exchange during the week before the outbreak of the war. The United States was a debtor in the international short-time loan market, and the conditions which were leading to the foreign sales of securities were an insuperable obstacle to the granting of new loans.

From the analysis of the foreign exchange situation in preceding pages the conclusion was reached that in all probability gold would have been exported from New York during the latter part of July and throughout August, even if there had been no foreign sales of securities on the New York Stock Exchange. All these sales, therefore, it may be concluded, involved obligations for immediate payment which could be met only by gold shipments. They were equivalent in effect to a general run upon banks by depositors and were at the same time of an even more serious nature because

they could not be checked by the approved method in the case of runs of continued payments, since they were not due to loss of confidence either in American banks or in American securities.

No banking system in a debtor country could be devised which would be able to endure the double strain which was imposed upon the banks of the United States by the wholesale dumping of securities by foreign investors on the New York market. To supply gold to the full amount of the purchase price and at the same time to grant loans to enable purchasers to carry the securities was soon seen to be a manifest impossibility. Banking necessities even more than those of brokers and their customers required the adoption of some means of preventing the further liquidation of securities by foreign holders.

Both bankers and brokers deferred action to the last possible moment. Even as late as Thursday the hope was still cherished that war might be avoided. The extent and urgency of foreign liquidation of securities seems to have been generally underestimated, partly, it may be presumed, because the inability to dispose of other non-European securities was not clearly perceived. A laudable desire to secure for the American market the prestige that continued dealings in securities would confer was also a potent influence favoring delay. At a conference on Thursday afternoon it was decided to take no action. Overnight an enormous volume of selling orders, in many cases without limitations as to price, was received from Europe. After hurried consultation between representatives of the stock exchange and of the clearing house banks it was decided, only a few moments before the hour of opening, to close the stock exchange for an indefinite period. Similar action was immediately taken by all other stock exchanges of any importance throughout the country and by dealers in unlisted securities as well. These drastic measures were, of course, immediately effective in preventing further sales of securities not only on foreign account but also between buyers and sellers within the country. Possibly dealings might have been continued under the system of minimum prices inaugurated when the exchange was reopened in December, but that was a method of conducting the business of buying and selling securities yet to be devised. In a future emergency it may well prove effective, but in the absence of experience of its possibilities it might not then have proved adequate for the purpose.

That the closing of the stock exchange was a necessary measure

has never been questioned. Indeed, without implying the slightest criticism of those responsible for the conduct of affairs, the opinion has been expressed that suspension two or three days earlier would have been of great advantage to the country. Everything in that eventful week was entirely without precedent. Conditions changed rapidly from day to day, even from hour to hour. It was at least possible that a peaceful solution of the difficulties between the European powers would be found. It was reasonable, therefore, to continue business as usual until it was clear that drastic measures were absolutely unavoidable.⁴

An earlier closing of the stock exchange would have been of much advantage in the foreign exchange market. Demoralization would have been somewhat less complete and, what is far more important, normal conditions might presumably have been restored at a much earlier date but for the indebtedness created by the sales of securities on foreign account. The discontinuance of the usual London exchange facilities for handling long bills necessarily dislocated the market, but gold exports might have proved adequate to provide the exchange to meet at least the more urgent obligations arising out of ordinary business transactions with foreign countries. In addition to the \$19,000,000 of gold exported on Monday and Tuesday, an additional \$17,000,000 was engaged during the remainder of the week. These exports served principally to provide the means for meeting foreign requirements of the bankers who shipped the gold. In the meantime extraordinary prices were being offered for exchange, as much as \$5.50 for demand exchange and \$6.35 and even more for cable transfers. Such quotations refer to particular transactions. These were not rates at which exchange could certainly be secured. They are chiefly significant as evidence of the complete demoralization of the exchange market. They were in no way due to ruthless exactions on the part of those who sold exchange, since all dealers needed exchange to cover their own obligations already due or maturing in the immediate future.

⁴ If the exchange had closed on an earlier date the final quotations would have been on a higher level. During the period of suspension unauthorized selling would have been more active while the volume of sales under the supervision of the Stock Exchange Committee would have been much reduced. The opening of the exchange would probably also have been deferred if closing quotations had not generally discounted the immediate effects of the war on security values. See below, p. 531 and also H. G. S. Noble, *The New York Stock Exchange in the Crisis of 1914*.

The available amount of exchange was hopelessly inadequate to supply the demand, but even if, in the absence of security sales, the supply created by gold exports had proved sufficient during the week ending August 1, it would have been entirely inadequate during the two succeeding weeks. After the declaration of war between England and Germany transatlantic sailings were practically discontinued until it was clear that England's sea power was able to provide a reasonable measure of security to ocean transportation. Nothing could be done to restore normal exchange conditions during this fortnight while shipping connections between Europe and the United States were interrupted. During this period new influences were at work in the exchange market arising out of the effects of the war upon American foreign trade and on American banking operations. It is necessary, therefore, at this point to postpone further consideration of the course of events in the foreign exchange market and direct attention to the effects of the war within the United States.

If the stock exchange had not closed on Friday, July 31, it is certain that the decline in the price of securities during the day would have been so extreme as to have occasioned numerous failures among brokers and their customers and presumably much loss to the banks as well. The sharp decline during preceding days had fortunately been accompanied by no important failures and, it may be added, had not gone much beyond a reasonable discounting of the probable effects of the war on the value of securities. To brokers the long period of enforced inactivity which followed was burdensome, but it did not subject them to the severe and urgent pressure of crisis conditions. To the banks the suspension of dealings in securities was fraught with far more serious and immediate consequences. A considerable portion, especially large in the case of the New York banks, of the assets of all of the banks of the country was impounded for an indefinite period. It was impossible to liquidate not only investments in securities but also both time and demand collateral loans.

The effects upon the banks of thus locking up a large part of their assets were far reaching though they proved less serious than was at first anticipated. Public confidence in the solvency of the banks does not appear to have been materially weakened. Moreover, taking the banks as a whole, it is clear that the funds available for other purposes were not very different in amount from what they would have been if dealings in securities had continued.

Even if the exchange had remained open, it is altogether unlikely that the banks would have found it possible during the weeks immediately following the outbreak of the crisis, to reduce appreciably either investments in securities or collateral loans. Past experience proves conclusively that during a crisis it is most inexpedient to attempt and practically impossible to bring about any appreciable reduction, either in investments or loans, of any kind. Much shifting of loans between the banks but little or no positive contraction even when it has been seriously attempted, has marked the course of all crises of the first magnitude.

The suspension of dealings in securities was a serious matter for the banks, primarily because in large measure it deprived them of the power to shift loans among themselves by means of ordinary banking operations. When a bank finds that its reserve is being depleted or that regular customers require additional accommodation, it can ordinarily readily adjust itself to the situation by calling demand loans or by making no new time collateral or commercial loans in the open market. After the closing of the stock exchange, commercial paper purchased from note brokers became the only class of loans which could be reduced without bringing pressure to bear upon regular customers. Obviously, the payment of collateral loans could not be insisted upon when there was no market in which either borrowers or bankers could sell securities. The shifting of loans was also equally difficult because for the same reason all banks were disinclined to make additional collateral loans. Many borrowers furnished additional security and in particular instances loans were reduced or fully paid. But the banks could not insist upon such action. In short, the particular class of loans, upon the liquidation or shifting of which our banks have mainly relied as a means of securing additional free assets, had become a wholly unavailable resource.

In all crises since 1860 the banks of New York and other cities had resorted to the device of the clearing house loan certificate, generally confining its use to settlements between the members of each particular clearing house. The primary purpose of this device had always been to relieve the banks from the necessity of attempting to contract loans upon a wholesale scale with all the disastrous consequences which that course always involves. In 1914 the sequence of cause and effect was reversed. On account of the closing of the stock exchange the banks could not even attempt to liquidate collateral loans, and, consequently, were obliged to

resort to the clearing house loan certificate or some other special means of making settlements among themselves.

The necessity for emergency measures on the part of the banks was by no means wholly due to the suspension of dealings in securities. At the close of the week ending August 1 it was apparent that the country was entering upon a period of severe crisis. With few exceptions, notably wheat and the other cereals, all industries the products of which are regularly exported in considerable quantities seemed certain to be seriously affected by the war. The cotton trade at once became completely demoralized. During the week there was a decline in cotton futures of somewhat more than \$10 a bale, about one third of the decline which was to come in the course of the next few months. On Friday, July 31, three cotton brokerage houses failed; and shortly after 11 o'clock the cotton exchange was closed, not, as was at first announced, until the following Tuesday, but, as it proved, for an indefinite period. Other cotton exchanges were obliged to take the same unprecedented step, thus involving the entire discontinuance of customary methods of determining prices and of marketing cotton. Disaster to no other single industry of the country could have such serious and far-reaching consequences. Owing to the almost exclusive dependence on cotton of a large part of the southern states, widespread bankruptcy of merchants and bankers, as well as of growers, became a threatening possibility. No other industries were so seriously affected directly by the outbreak of the war and no considerable section of the country was mainly dependent upon any of them.

In addition to its direct influence upon exporting industries it was at once apparent that the war would prove a most unfavorable factor in all industries requiring large investments of capital. The further development of railroads, local utilities, and, indeed, construction work of all kinds, was bound to be greatly retarded with a consequent slackening in the demand for many kinds of material and equipment.

The various causes of trouble which have been mentioned—the suspension of dealings in commodities, the disorganization of the foreign exchanges, the curtailment of exports and of the supply of capital—were unlike the causes of all crises with which the country had hitherto had experience. But however diverse the more specific causes of crises may be, the financial or purely banking consequences and requirements during the early stages of all crises are

strikingly similar. Uncertainty regarding the future spreads rapidly throughout the business world. Extreme caution, perhaps better characterized as timidity, paralyzes not only enterprise but normal business activities as well. Consumption is curtailed within the narrowest possible limits, while producers at every stage contract operations and all too frequently fail to make payments with accustomed promptness. At the beginning of a crisis there is, therefore, always a widespread need for additional loans from the banks. Loan expansion at such times does much to restore confidence in the future, reduces forced liquidation to a minimum and enables producers and dealers to carry goods until they can be absorbed under the new conditions of slackened consumption and restricted production. In the particular instance of the crisis of 1914 there was much ground for thinking that a liberal loan policy on the part of the banks would prove unusually effective in meeting the situation. The benumbing effects of the outbreak of the war were certain to pass off in the course of time. Most of the industries of the country are not much concerned with export business, and domestic savings have for a number of years furnished very nearly all the capital requirements of the country. Moreover, the war, if long continued, was certain to create a demand for many products which are not regularly exported at all or, at all events, in large quantities. Adjustment to the new conditions was to be expected far more speedily than in the case of a crisis primarily due to domestic causes. For these reasons, while the immediate requirements for additional banking accommodation were not less than in former crises, a liberal loan policy promised to be exceptionally effective in meeting the needs of the situation.

The ability of the banks to render assistance by means of additional loans would have been exceedingly small in the absence of emergency measures. The unused lending power of the banks of the country is never large except during periods of depression immediately following crises and it had been much reduced by the heavy gold exports during May and June and the latter part of July. On June 30, the date of the last return of condition to the Comptroller of Currency, the surplus cash reserves of the national banks were at an unusually low level for that season of the year. The banks of central reserve and reserve cities holding \$701,000,000 in cash were \$10,000,000 below legal requirements, while the country banks, holding \$268,000,000, were only \$46,000,000 above requirements. Doubtless there was some liquidation of loans with conse-

quent reduction in deposit liability after the turn of the half year, but such increase in available lending power was presumably much more than offset by the loss in gold taken for export at the end of July. Any considerable increase in loans, to say nothing of withdrawals of currency, would certainly have brought the banks generally below reserve requirements, a condition which in past crises had always led to general efforts at loan contraction, the husbanding of reserves carried to the point of restrictions on cash payments and the consequent breakdown of the check machinery of the country.

At the time of the closing of the stock exchange, indications were not lacking that the same influences were at work which in past crises had occasioned the dislocation of the banking machinery of the country. During the week ending July 31, the loss of \$56,000,000 in the cash reserve of the New York clearing house banks and trust companies, was some \$20,000,000 in excess of the withdrawals of gold for export during the week. Although at this season of the year the normal movement of money is from the interior to New York, it is evident that anxiety over the situation was having its customary effect in precipitating withdrawals of balances by banks in other parts of the country and Canada.

As in 1907 the issue of clearing house loan certificates alone would surely have been followed immediately by the partial suspension of cash payments not only on the part of the banks of New York City, but by those of the entire country. The loan certificate simply enables banks to defer cash settlements with banks in the same clearing house. It does not provide them with means of meeting obligations due elsewhere. Indeed, the use of the loan certificate is altogether likely to make it necessary for banks to restrict payments since a bank weak in reserve does not secure additional cash even if it has a succession of favorable clearing balances.

The clearing house loan certificate served a useful purpose in this crisis, but fortunately the banks were not obliged to rely solely upon that imperfect device. For the first time since the establishment of the national banking system the banks exercising the powers conferred upon them by the Aldrich-Vreeland act of 1908 were able to issue bank notes freely in coping with a crisis. This act was to have expired by limitation on July 1, 1914. Although there had been no occasion for making use of its provisions and none seemed likely to present itself in the immediate future, the

act was luckily extended for another year by the Federal Reserve Act of 1913. At the same time the tax on notes issued under the provisions of the act was reduced from a minimum of 5 per cent to 3 per cent during the first three months of issue, thereafter increasing by $\frac{1}{2}$ per cent a month to a maximum of 6 per cent contrasting with increases of 1 per cent a month to a maximum of 10 per cent according to the original act. The availability of the notes was still further increased by an act which passed through both branches of Congress on August 3, repealing the requirement that no bank might take advantage of the act unless it was already issuing bond-secured notes to the amount of 40 per cent of its capital. At the same time the limit on the total issue of \$500,000,000 was repealed and the amount of notes which particular banks might issue was increased from 100 per cent to 125 per cent of capital and surplus.

The somewhat complicated provisions of the Aldrich-Vreeland act proved no obstacle to rapid and effective action. Little use was made of the provision for taking out emergency notes by individual banks against bonds other than United States government bonds, deposited in the United States Treasury as security.

Early in August the Secretary of the Treasury approved applications of nine banks for \$910,500 of notes secured in this way. These banks were so situated as not to be able to take advantage at that time of the other method of issue for which the act made provision and under which all further issues were made. Banks not less than ten in number and having a capital and surplus of at least \$5,000,000 in any city or geographical district, associated together in national currency associations formed for the purpose, were authorized to issue notes not only against approved bonds but also against commercial paper. A descriptive list of the securities taken was to be forwarded to Washington, but all the details of issue were handled by the officers of each association. This method of taking out additional currency closely resembled that with which bankers were already familiar in issuing clearing house loan certificates.

During the five years since the passage of the Aldrich-Vreeland act 21 associations with a membership of 325 banks had been formed. This number was increased to 44 with a membership of 2102 banks during August and September. Earlier associations had been mainly composed of city banks, although during the crisis the membership of many of them was extended to include nearby

country banks. Banks of the smaller cities and country banks organized the associations which were formed after the beginning of August. Circulation was taken out through 41 of the 44 associations by 1190 of the 2102 members. Credit is so fluid, however, provided the banking machinery of a country does not become dislocated, that the good effect of the notes was quite as widely diffused as if a larger number of banks had participated in issuing them.

Thanks to the emergency notes, the banks were able to maintain payments without difficulty, both over the counter and between themselves. All requirements for currency for use outside the banks were met with the new notes, thus safeguarding the reserves of the banks. The notes also were a positive means of increasing reserves. Gold, gold certificates, and other lawful money received by the banks over the counter in the ordinary course of business were retained, while counter payments were regularly made in the new notes, which proved in every way quite as acceptable, indeed, in one respect more so, since they were all new currency. By this means the banks in course of time were able to secure additional means for meeting such payments as could not be made with the notes.

For payments between banks, the notes were far more serviceable than loan certificates, because they could be used between banks in different places. They were also used in settlements between banks in the same place; consequently a smaller number of clearing houses resorted to the device of the loan certificate, and the amount issued was much less than in 1907. The notes, however, were not an altogether satisfactory substitute for the loan certificate within its own restricted field. To state banks and trust company clearing house members, the notes were not directly available. To banks having an unfavorable clearing balance, the notes were a more attractive medium of payment, because the tax of 3 per cent was less burdensome than the 6 per cent or more regularly paid on loan certificates. For the same reason, to banks with favorable balances, the loan certificate was, of course, a more acceptable medium of payment.

Thanks again to the emergency notes, and in striking contrast with experience in former crises, the banks were able to meet requirements for additional loans occasioned by the crisis, and at reasonable rates. During the first half of August bankers did, indeed, manifest some hesitation about extending credits. This

was in part due to uncertainty as to the effects of war on the ability of borrowers to meet their obligations at maturity. Moreover, the issue of emergency notes was an entirely novel device, and, until it was in full operation and its effectiveness had become manifest, there was naturally some disinclination to adopt a policy of liberal loan expansion. But this period of hesitation was short and was not marked by attempts at drastic loan contraction which in former crises have added enormously to the difficulties of the business community. Purchases of commercial paper from note brokers were much reduced, but the market was never completely suspended as in former crises. Many who customarily borrow in the open market resorted to their own banks for accommodation, in part, no doubt, from necessity, particularly in the case of less well-known firms, but often because at the high rates prevailing, it was advisable to borrow for shorter periods than is customary on paper placed by note brokers. At no time during the crisis was there any appreciable complaint of inability to secure accommodation from the banks. All legitimate business requirements for additional credit would seem to have been fully met by the banks.

Rates for loans advanced sharply at the end of July and continued at a high level throughout August and much of September, but at no time were the abnormally high rates quoted which have characterized former crises in this country. Rates for call loans, which, owing to the suspensions of dealings in securities, had become time loans without definite maturity, advanced to 8 per cent at the beginning of August. From 6 per cent to 8 per cent was charged during the entire period that the stock exchange remained closed. It was clearly desirable to hold rates for this class of loans at a level which would make it advantageous for borrowers to reduce or liquidate their obligations. Rates for collateral time loans ranged between 7 per cent and 8 per cent. While the stock exchange remained closed there was but a nominal difference between the time and the demand call loan. Commercial paper was obviously more liquid than other loans and on the whole was taken at somewhat lower rates. The highest rate quoted at any time for commercial paper of the best known borrowers seems to have been 7 per cent, and 6 per cent became the ruling rate early in September.

Statistical comparisons of the volume of loans in this and former crises are highly significant. No very marked difference is, indeed,

to be noticed in the case of the New York banks. Always in former crises outside banks have reduced loans in that market, compelling the New York banks to grant additional accommodation if a catastrophe was to be avoided. In 1907, for example, the loans and investments of the New York clearing house banks increased from \$1,087,000,000 to \$1,187,000,000 during the first three weeks of the crisis and changed very little during a number of weeks thereafter. In 1914 the loans and investments of the clearing house banks and trust companies increased from \$2,073,000,000 to \$2,127,000,000, between July 31 and August 14. During several weeks thereafter changes in the loan account were too slight to have any significance. Loan expansion on the part of the New York banks, it will be noted, was somewhat greater absolutely and very much greater relatively in 1907 than in 1914. Explanation is found in the very different course followed during the two crises by the banks generally throughout the country. Between August 12 and December 5, 1907, the loans and investments of all the national banks of the country increased by only \$35,000,000, from \$5,478,000,000 to \$5,513,000,000. Between June 30 and September 12, 1914, there was an increase of \$307,000,000, from \$7,510,000,000 to \$7,867,000,000. In 1907 the national banks of the country, excluding those of New York, contracted loans, while in 1914 the total loan increase was not only more considerable, but was also general throughout the entire country.

By the middle of September the initial effect of the crisis in creating a need for additional loans seems to have fully worked itself out. The return of the condition of the national banks on October 31 shows practically no change in the loans and investments of the national banks, which then stood at \$7,865,000,000, but on the date of the next return, December 31, there was a reduction of \$70,000,000, to \$7,695,000,000. By that time the effect of liquidation and less active business was naturally becoming manifest in a smaller volume of bank loans.

Owing to the circumstance that this was the first crisis in the United States in which the situation was handled in the only proper fashion, by means of loan expansion, these figures have particular significance. The loan increase, if the returns of the national banks may be taken as a basis for judgment, was in the neighborhood of 4 per cent of the previous volume of loans. During a period of something like six weeks there was a demand for addi-

tional accommodation on the part of the business community. Then followed a period of about the same length during which loans were at a stationary level. At the end of about three months it would appear that business had become adjusted to the new conditions which had been occasioned by the crisis, and thereafter loans showed a declining tendency, and the period of pressure upon the banks was at an end. Whether there will be need for a similar increase in loans and whether the duration of the period during which the increase is taking place will be similar in future crises, can not of course be determined with certainty. There is some ground for thinking that liquidation may begin somewhat earlier and be carried through somewhat more rapidly in the case of a crisis due to unsound conditions within the country. It may, also, be presumed that in such cases some part of the burden of supporting the situation can be shifted to foreign lenders. The opinion may therefore be hazarded that the percentage of loan expansion to the existing volume of loans furnishes a rough indication, at any rate, of the additional credit which may be required in future crises under the operation of the federal reserve banking system.

All requirements for additional currency during the crisis were fully met, but it is not possible to determine statistically the exact extent of these requirements. During August \$208,000,000 was issued to the banks under the provisions of the Aldrich-Vreeland act. By the end of September \$326,000,000 had been issued, and at the end of October, \$369,000,000. Banks began to retire notes during the last days of October, when the total was reduced by \$8,000,000. Thereafter retirement was rapid, the total outstanding being reduced to \$205,000,000 on November 27, to \$150,000,000 by the end of December, and to about \$60,000,000 at the end of January. For the amount of these notes actually in circulation, data are available only on the dates of the returns of condition of the national banks to the Comptroller of the Currency. Between June 30 and September 12 the total amount of notes in circulation increased by \$196,000,000, from \$722,000,000 to \$918,000,000. Of these notes the amount issued against United States bonds on these dates and also on the dates of the two subsequent returns was between \$735,000,000 and \$740,000,000. The return on October 31 showed a further increase of \$100,000,000, while that of December 31 indicated a decline of \$170,000,000. On October 31, at the time when there was the largest amount of Aldrich-Vreeland

notes in circulation, namely \$279,000,000,⁵ the amount of circulation actually taken out by banks was \$362,000,000.

It is to be noted that the duration of the period of loan expansion and that of increasing issues of currency were not the same. Loan expansion seems to have culminated by the middle of September, while the volume of emergency currency increased until nearly the end of October. Presumably, if the requirements for additional currency for use outside the banks had been the only cause of issue, there would have been a closer approach to uniformity in the two periods. But other causes were at work. In the first place, all of the notes which were in circulation in the sense of being a liability of the banks were not in actual circulation. Since bank notes had become the larger part of the total circulating medium, banks received more of them over the counter in the ordinary course of business. Thus, on October 31, the banks held \$87,000,000 in each other's notes, contrasting with only \$43,000,000 on June 30, and \$73,000,000 on September 12. The substitution of the emergency notes for gold and other reserve money in circulation also accounts for some part of the increase in circulation, especially during the period between September 12 and October 31. Between these dates the reserves of the national banks increased \$22,000,000, from \$904,000,000 to \$926,000,000, although the total amount of money in the country, not including that in the United States Treasury, was practically stationary, having been \$2,626,000,000 at the beginning of September and \$2,632,000,000 at the beginning of November. When allowance is also made for the similar tendency to accumulate reserve money by state banks and trust companies, it will be seen that the increase in emergency bank notes during September and October is very largely, if not entirely, accounted for by other factors than an increase in the use of money outside the banks.

It would seem, then, that additional requirements for currency occasioned by the crisis were somewhat less than \$300,000,000, although, as we have seen, the maximum amount of notes taken out was \$362,000,000. It would also appear that the demand for additional currency, so far as the general public was concerned,

⁵ The volume of notes in circulation never quite equals the par value of the United States bonds deposited as security. On the basis of returns when only such notes have been issued, it may be estimated that \$20,000,000 were in the possession of issuing banks and that therefore there were about \$300,000,000 of emergency notes in circulation on October 31.

reached the point of greatest intensity in September, when, as we have seen, loans also were at their highest level. Bearing in mind the qualifications mentioned in analyzing the movement of loans, it would seem reasonable to conclude that the federal reserve banks will be obliged to furnish some \$300,000,000 of additional currency in future crises. It is essential also that the ability of the reserve banks to furnish a much greater amount of currency shall be as certain and obvious as in 1914, when the banks were operating under the terms of the Aldrich-Vreeland act.

If the crisis of 1914, like all former crises in the United States, had been directly due to unsound business conditions within the country, additional currency and credit would have met all the difficulties of the situation, in so far as they are susceptible of removal or relief through the banks. Thanks to the maintenance of cash payments and a liberal loan policy, the crisis did not degenerate into a panic, and opportunity was given for gradual adjustment and liquidation, involving a minimum of loss. But the crisis was primarily due to foreign causes, and consequently the difficulties with which the banks were confronted were not limited to the prevention of panic and the provision of means which would permit the adjustment of domestic business to the new situation with the least possible loss and strain. The complete disorganization of the foreign exchanges and the conditions which had made necessary the suspension of dealings in securities and the closing of the cotton exchanges were matters which required something more than liberal credits and issues of emergency notes. The collapse of the domestic banking machinery would indeed have deferred arrangements designed to meet these special difficulties. Clearly, also, the prevention of panic and the adjustment of domestic business to the situation were matters of primary importance. In restoring the foreign exchanges the banks could properly use only such funds as were available after meeting these domestic requirements. But, as we have already seen, by means of the issue of emergency notes, the banks were able not only to meet all purely domestic requirements, but also to strengthen their reserves through the substitution of the notes for lawful money previously in use outside the banks. The cash reserves of the banks, therefore, to whatever extent they were prepared to make use of them, were available for the purpose of bringing back foreign exchanges to a normal state.

On the last day of July, it will be recalled, the cotton and stock

exchanges were closed for an indefinite period. London, for a number of days, had ceased to perform its regular foreign exchange functions of accepting and discounting bills of exchange. Notwithstanding withdrawals of something more than \$40,000,000 of gold for export, there was a large outstanding indebtedness against New York, immediate payment of which was demanded by London. The foreign exchange market in New York had completely broken down, such rates as were quoted representing merely particular transactions. During the first two weeks of August it was physically impossible to restore normal exchange conditions. Gold could not be shipped because insurance could not be procured at any price, and on account of the almost complete lack of shipping facilities. For the time being, everything was subordinated to the immediate necessity of extricating the thousands of American tourists stranded in various parts of Europe. Bankers exerted themselves strenuously to induce their foreign correspondents to continue payments on travellers' checks and letters of credit, and with a good measure of success after the first few days of August. Many tourists, however, were wholly without funds, either because they had not been intending to return to the United States at this time, or because sailings of the boats on which they had engaged passage were discontinued. To meet this situation, Congress appropriated \$2,750,000, which, with funds provided by bankers, was taken to Europe on the cruiser *Tennessee*. From the government funds advances were made to all Americans who seemed in positive need of assistance, and by the end of September practically all American tourists who desired to return were brought back to the country.

During the month of August certain parts of the complicated mechanism of the exchanges were repaired, but other parts quite as essential for normal operation were still out of commission. In London, with commendable celerity, measures were taken to make possible the resumption of the accepting and discounting of bills. Saturday, August 1, and Monday, August 3, were regular bank holidays in London. These were followed by three special bank holidays, and on August 6 a special and on August 13 a general moratorium were established. The moratorium gave the needed time for devising and putting into operation positive remedies.

Detailed consideration of the nature and effects of the moratoria in Great Britain and elsewhere does not come within the scope of

this article, because they had no direct bearing upon the exchange situation between the United States and other countries. If the United States had been a creditor nation in the international short-time loan market, holding large numbers of bills drawn on other countries, the moratoria would have been a factor of primary importance. But as has already been seen, bills going forward during July had been regularly discounted and sight exchange had at once been sold against the proceeds. No appreciable amount of American money was tied up and payment of no appreciable amount of indebtedness was deferred on account of the moratoria either in Great Britain or in other countries. Moratoria in other countries weakened London, because other countries were generally indebted to it, but the English moratorium was designed to protect the London market, owing to the inability of the different financial institutions there to meet their obligations to each other. The British moratorium freed the London accepting houses from immediate bankruptcy, but did nothing to relieve them from responsibility after its expiration. If British trade was to continue, to say nothing of resuming London's function as the world's financial center, it was necessary to make arrangements which would permit accepting houses to take on new bills and also to restore the value of such acceptances. It was also necessary to safeguard the banks and bill brokers, which were the principal holders of the ante-moratorium bills. On August 13 it was announced that the Bank of England, guaranteed against loss by the government, would discount all pre-moratorium bills without recourse to holders, thus affording full relief to the banks and bill brokers. A little later, on September 4, on behalf of the accepting houses, it was announced that the Bank of England would advance money to enable acceptors to take up their bills for a period continuing for one year after the end of the war at 2 per cent above the bank rate of discount.⁶ Whatever responsibility for payment still rests upon the accepting houses was deferred to a time when it may be presumed most of those for whom bills have been accepted will be able to meet their obligations. In any event, whatever may happen to the accepting houses one year after the close of the war, the value of the acceptance on current bills was restored, since they will mature well within that still indefinite date.

An immediate consequence of the arrangement which was adopted

⁶For a detailed account of these measures, see Hartley Withers, *The War and Lombard Street*.

as a means of relief for the London banks was to create a condition of extreme monetary ease in London. In order to escape possible loss or delay in the payment of pre-moratorium bills, it was only necessary for the banks to rediscount them at the Bank of England. In ordinary times banks and bill brokers rediscount at the Bank only in order to secure additional funds. Now bills in enormous quantities were taken to the Bank merely to escape danger of loss or delay in payment at maturity. During the three weeks ending with August 13 there had been a large amount of borrowing at the Bank, owing to the crisis. Loans (other securities) increased from £27,000,000 to £70,000,000 during that time, but, during the following three weeks to September 2, there was a further increase of £51,000,000 to £121,000,000. Practically all of this latter increase seems to have been due to the desire of the banks to relieve themselves of the danger of loss or delay in payment on pre-moratorium bills.

The proceeds of these discounts swelled the deposit balances of the other banks at the Bank of England. Since these balances are the reserves upon which the other banks build up their own deposit obligations, it obviously placed them in position to extend new credits to a far greater amount. Throughout August, however, the London banks would seem to have followed an extremely conservative, if not timid, policy. It was not until September that the effect of the enormous rediscounts at the Bank of England became manifest in a more liberal loan policy and in the rapid easing of rates. At first also the banks were unwilling to handle the accustomed variety of bills, discriminating not only against finance bills, but also against commercial bills drawn in connection with trade between foreign countries. Gradually, however, restrictions were removed, and in the course of the month of October it would seem that every variety of bill was being handled as usual in the London market, although of course unusual caution was exercised on account of the various new elements of uncertainty resulting from the war.

Resumption of the business of accepting and discounting bills by London was a necessary condition for the restoration of normal dealings in exchange. But something more was also required. London insisted upon the immediate payment of all the obligations which had been created by the sale of securities on foreign account in New York during the week before the closing of the stock exchange. The impossibility of making payment in gold

during the first part of August was recognized, but after the establishment on August 12 by the Bank of England of a depositary in Ottawa for the receipt of gold, London bankers insisted that there should be no further delay.

In New York by the middle of August the foreign exchange market had reached a condition of relative calm, rates for demand exchange had settled to the neighborhood of \$5 for the pound sterling. At this rate there was a considerable profit in shipping gold to Ottawa, since, on the basis of the price which the Bank of England was prepared to pay for gold shipped to Canada, the gold export point was at about \$4.91. No gold was exported, however, because no gold was available. The banks of the country had suspended gold payments, making payments only in currency. The banks exhibited no more readiness to allow their reserves to be used in meeting foreign payments than on former occasions when the withdrawals were for domestic purposes. From the beginning of August to the end of October gold payments were restricted. The course of our banks during former crises strongly suggests that the unwillingness of the banks to supply the gold necessary to restore the foreign exchanges to a normal level was not because gold, rather than other reserve money, would have been withdrawn. Whenever reserves have dropped very much below legal requirements, our banks have always restricted payments if further withdrawals were threatened on a large scale. In the past the demand had come largely from the west and south. On this occasion it happened to be for the purpose of meeting foreign payments.

We have here simply another instance of the uselessness, under the system since fortunately changed, of the reserves of our banks when an occasion for their use presents itself. No one bank or small number of banks could have continued gold payments while other banks were following the policy of restriction. But while inability to maintain payments may be attributed to a faulty banking system, it has also to be admitted that there was a regrettable willingness on the part of the financial community to adopt restrictive measures. The absurd policy of hoarding reserves was generally regarded as wise and proper; and reasons, which at best were but lame apologies for the course taken, were generally held to be the expression of profound financial wisdom. The European moratoria, the probability that merchandise exports would provide means of payment in the course of time, and uncertainty whether gold would be sent to the United States in case the balance of

payments should swing in favor of this country during the course of the war, were all offered as reasons for postponing the payment of obligations which were already past due.

Had the federal reserve banks been in full operation for a number of years, it is to be presumed that gold would have been furnished to satisfy all foreign requirements. Surely it is to be hoped that in the administration of the reserve banks, recourse to the weak and ineffective policy of restrictions upon cash payments will never be given a moment's serious consideration. It is probably fortunate, however, that the new banks did not begin business, as was originally expected, in June or July. While they might have been helpful, it is unlikely that they would have been able at the moment of beginning active business to maintain the normal course of banking operations. Partial failure to do so might have lessened confidence in the new system, and such confidence, it need hardly be said, is absolutely indispensable if the system is to perform the functions for which it has been designed. The fact that it was not in operation at this time of crisis, sometimes declared unfortunate, was in reality a piece of good fortune.

How much gold would have been taken for export if payments had been maintained can not be determined. Estimates of the amount of indebtedness which were due offer no indication of the amount of gold which would have been required. Nearly all of the gold which might have been exported would have gone to London, and by creating easier conditions in that market, the possibility of securing new loans to take the place of maturing obligations would have been enhanced. Moreover, foreign short-time loans to this market would doubtless have become more attractive if we had shown a determination to continue cash payments even in the midst of universal financial commotion.

Owing to the failure to adopt the simple and direct method of meeting foreign obligations as they matured, the foreign exchange market continued in a disorganized state until the end of October. During August the volume of matured indebtedness seems to have increased, since at the outset the war occasioned a far more considerable decline in exports than in imports. The amount of foreign indebtedness would have still further increased in September, if settlements had been limited to the amount of exchange created by trade movements. About \$80,000,000 out of a total of \$100,000,000 of short-term notes of the city of New York, maturing at various dates between September and January, were held in Eng-

land and France. To maintain the credit of the city it was imperative not only that the city secure new loans, but also that payment be made to foreign holders of these notes. By means of a syndicate, in which all but four of the 130 banks and trust companies of New York participated, the necessary arrangements were made. The members of the syndicate agreed to supply gold or exchange as called upon by the syndicate managers, but in so far as exchange could be secured by the managers payment was to be made in checks. Under this arrangement, means for making payments abroad, which would otherwise have been unavailable, were secured but only to the extent that subscribers were called upon to furnish gold. Exchange secured by the syndicate managers or furnished by the banks themselves lessened the amount of exchange available for other purposes. Between September 16 and November 6 subscribers to the syndicate provided \$52,000,000, of which \$17,000,000 was in checks or in exchange and \$35,000,000 was in gold. No gold was required in connection with the remaining \$28,000,000, since after the middle of November the syndicate managers found no difficulty in procuring exchange.

During September another arrangement for supplying gold for export was completed. On September 4 the Federal Reserve Board had called a conference of representatives of the clearing house banks of all reserve cities. A committee of bankers appointed at this conference prepared a plan which was adopted for the formation of a gold pool of \$100,000,000. Contributions to the pool were requested in proportion to the gold holdings of the banks of the various reserve cities. Banks everywhere readily assented to this arrangement, and on September 30 the managers of the pool called upon subscribers for 25 per cent of their subscriptions. At once \$10,000,000 was shipped to the depository of the Bank of England at Ottawa, and against this sum exchange was sold from day to day. No attempt was made to provide a sufficient amount of exchange to bring rates down to the normal export point. The purpose of the managers of the pool seems to have been to use the funds at their disposal to steady rates in the neighborhood of \$4.96 for demand sterling.

During the last week of October, foreign exchange rates suddenly and unexpectedly declined sharply to the gold export point of \$4.90, and after the middle of November went definitely below the gold export point. The decline did not stop at this stage, however, and by the end of the year rates were being quoted at

which in normal times gold imports would have taken place. It does not fall within the scope of this paper to analyze the transformation in the exchange situation which came during the first half of 1915, when an enormous foreign indebtedness in favor of the United States was incurred through the demand for various American products occasioned by the war. It is, however, now evident that the same influences which created this indebtedness caused the sudden drop in exchange last October and November. The New York City pool and the gold pool steadied the exchange market during the latter part of September and early in October, and, by the evidence which they gave of the purposé of American bankers to meet all obligations, doubtless facilitated the creation of exchange through borrowing in London at that time. But the principal cause of the decline in exchange was the expansion of exports. The extent of this influence during any one month was not fully indicated in the trade figures for that month, because much of the business with the countries at war is based upon orders which require months before completion and shipment. Payment in advance, and even certainty of payment at a future date, provided the basis for immediate dealings in exchange.

When dealings in securities were suspended it was everywhere recognized that they could not be resumed without restrictions until normal conditions had been restored in the foreign exchange market. From the middle of November, however, and to an increasing extent week by week, sales of securities on foreign account could evidently be absorbed without involving gold exports. Moreover, the condition of artificial monetary ease in all European countries, resulting from the expansion of credit by the various European central banks, removed, at least for the time being, much of the inducement on the part of foreign holders to dispose of American securities. The full effect of these influences could not, however, be exactly determined, and therefore to resume dealings in securities without restrictions would have involved the assumption of risks which would have served no useful purpose. Further, owing to the long discontinuance of dealings, it was at least possible that many American holders of securities were awaiting the opportunity to convert their holdings into cash, and, finally, there was no certainty of a general readiness on the part of the investing public to absorb securities at the level of prices of July 30, when the stock exchange was closed.

Dealings in securities were therefore wisely resumed by a suc-

cession of steps. During August and September sales of securities, where a clear case of necessity was made out, were permitted at prices not below those of July 30 through stock exchange committees or, in the case of unlisted securities, committees representing dealers in such issues. In the latter part of September dealings in listed bonds and notes and in unlisted bonds and shares were authorized at some concessions from the prices of July 30, but still under supervision. During October listed guaranteed stocks might be dealt in in this way, and all restrictions were removed from dealings in unlisted securities selling at less than \$10 a share. These were, of course, securities not largely held abroad. During November all restrictions on dealings in unlisted securities were removed and also those upon listed guaranteed stocks and on listed bonds and notes maturing before 1917. Finally, on November 28, the stock exchange was opened for public dealings in listed bonds for cash only and at minimum prices which could be changed from time to time by the stock exchange committee. On December 12 the exchange was opened for dealings in stocks on similar terms, with the exception of a certain number of securities, chiefly of an international character. Dealings in this class of securities were allowed on December 15. During the following weeks the minimum prices for various securities, in which there had been no dealings at the original prices, were reduced from time to time, but on the whole the general level of quotations was not far from that at the time the exchange was closed. In January the restrictions limiting sales to those for cash only were removed, thus making it more feasible for foreign holders to dispose of securities in the New York market. Finally, after a pronounced advance in the general range of quotations, on April 1 all restrictions upon dealings were removed.

At the beginning of November, although it was not then clearly evident, the crisis in the United States, with the exception of the cotton-growing southern states, was a thing of the past. Normal marketing conditions were indeed restored with the reopening of the cotton exchange on November 16. Business began with quotations in the neighborhood of 7.50 cents a pound, contrasting with 10.50 cents at the time the exchange closed at the end of July. Cotton was then being sold in the South at from five to six cents a pound, and, with a record crop of 16,000,000 bales, an advance in the price of the staple seemed altogether improbable. The resources of southern planters, merchants, and banks were clearly wholly inadequate to carry any considerable part of the crop over to an-

other year. To meet this situation, banks of northern cities, acting in close association with the Federal Reserve Board, subscribed a fund of \$100,000,000, the southern banks agreeing to participate on a somewhat different and less advantageous footing for \$35,000,000. From these funds, loans maturing in February, 1916, were to be made on cotton as security taken at six cents a pound. Subscriptions to this arrangement were not entirely secured until the very close of the year. This cotton pool would have proved the means of affording necessary relief for the South but for an unexpected increase in the demand for cotton. Doubtless the existence of the pool did much more to improve sentiment during November and December, though there was no marked change in the price of cotton during those months. Beginning with January there was a marked increase in the foreign demand—week by week exports approaching or exceeding those in previous years. Cotton prices advanced sharply and were in the neighborhood of nine cents a pound at the end of January, and nearly ten cents a pound at the end of February. In these circumstances there was no occasion to make use of the resources of the cotton pool. On February 1, the last day for receiving applications, requests for only \$28,000 in loans has been received. These loans were transferred to a bank, and the Cotton Loan Association's activities were ended.

The crisis of 1914 was so special in its character that it affords a somewhat uncertain basis for conclusions of general validity. That our banking system was ineffective in an emergency received further proof. The Aldrich-Vreeland notes provided an adequate means of meeting purely domestic requirements, but quite as clearly the course of the crisis indicated that something more was needed to enable the banks to cope with a crisis in which financial relations with foreign markets are disturbed. In no former crisis was the aid rendered by the government so immediate and effective. The Federal Reserve Board also took an active part in securing concerted action among the banks. These are most promising indications of the service which may be expected from the federal reserve banking system in future emergencies.

O. M. W. SPRAGUE.

Harvard University.

THE TARIFF AND THE ULTIMATE CONSUMER¹

The purpose of this article is to emphasize the fact that, both in the theoretical discussion of the tariff question and in the practical determination of tariff rates, an important element of the problem has too frequently been omitted. I refer to the great difference between producer's prices and consumer's prices and to the relation which exists between the two. The discussion of the relation of the tariff to prices is generally conducted on the assumption that there is a given single price for an article in one country at any given time, rather than with reference to the important commercial fact that there are different prices for the same article at different stages of distribution. Of course, this very simple fact has never been entirely forgotten, but it has been too frequently assumed that producer's prices and consumer's prices somehow move together automatically, and that a change in the one will always be reflected in the other. In the Middle Ages the attempt was made to bring about such an adjustment of prices by positive statute. The characteristic of the Assizes of Bread and Ale was the provision determining the size of the farthing loaf according to each slight fluctuation in the price of wheat. In the same way the price of ale was regulated according to the price of the raw material. In modern economic writing the all too easy assumption has usually been made that a similar adjustment between producer's prices and consumer's prices is secured by means of competition. In the case of a large proportion of goods bought for immediate consumption, such an adjustment often does not appear at all, even over considerable periods of time. In fact, price conditions frequently change altogether before the long-time forces, which might ultimately bring such adjustment, have had time to operate. This makes much of our theoretical reasoning regarding prices entirely useless for the actual problems of commerce and even suggests the necessity of a radical revision of our price theories. Price phenomena, which the economist has been in the custom of waiving aside as "abnormal" or "temporary," are really every day occurrences in the business world and are persistent and ordinary rather than unusual. The exceptions to the supposed general rule are so common that one may well ask

¹ This article was prepared before the appearance of Professor Taussig's *Some Aspects of the Tariff Question*. A brief note is appended at the close of the article, indicating its relation to this admirable new work.

whether, both for the purposes of economic theory and for the problems of economic legislation, the ordinarily accepted theory as to competitive prices is not more a hindrance than a help.

It would be possible to give illustrations from a great number of the articles bought for daily use by the average man and woman. The price of a loaf of bread does not fluctuate directly with the price of wheat, nor the price of a glass of beer with the price of barley. There are very many articles of daily use the prices of which are fixed and customary and, therefore, will not be raised or lowered according to changes in either the supply or price of the raw material. True, the producer, under conditions of competition, must adjust his price to the conditions of supply. But the producer does not sell directly to the consumer. His price may show most extraordinary changes over a period of years, while the consumer pays the same price throughout. A typical illustration is that of the herring or sardine industry on the coast of Maine. The price to the consumer is uniformly 5 cents per can, which is the equivalent of \$5 per case in the producer's hands. The producer, however, gets anywhere from \$2.30 per case to \$3.75 per case, according to the conditions of the season. The difference of 25 cents a case may be a matter of material profit or loss on the part of the packer. According to the ordinary theory of competition, he should be selling his goods under conditions to assure him a "normal profit in the long run." As a matter of fact, he may "make a killing" or may "go broke." But what happens to the producer seems to have no effect upon the consumer. Whether the packer sells below cost or sells at a price which gives him a handsome profit on his season's operations, the consumer still pays his customary 5 cents. This, instead of being an exceptional industry, is quite typical of a large part of business at the present time under our system of distribution with its rigid customary or "set" prices. The price paid by the consumer and the price received by the producer seem to have very little direct relation. To make clear in greater detail the surprising complexity of the situation, let me take a few illustrations from the report of the Tariff Board on the cotton industry regarding the price of cotton bedquilts. Throughout this article the writer confines himself to illustrations from industries covered by the reports of the Tariff Board because he served as a member of that body during the three years of its existence, 1909-1912. Many similar illustrations could be given from a wider range of industries.

In 1907 the manufacturer's price for a certain cheap cotton bedquilt was 65 cents. The jobber sold this quilt to the retailer for 75 cents, and the retailer sold it to the consumer for \$1. In the following year this same quilt was sold by the manufacturer, because of difference in the price of raw material for $2\frac{1}{2}$ cents less. The jobber's price was correspondingly reduced by $2\frac{1}{2}$ cents, but the retailer's price to the consumer was still \$1. In 1911 this same quilt was sold by the manufacturer for 75 cents, an increase of 10 cents over the price of 1907. The jobber now added 25 cents instead of 10 cents to the price and sold to the retailer at \$1, and the retailer sold to the consumer at \$1.50. Thus an increase of 10 cents in the price at the mill became an increase of 50 cents to the purchaser. The actual profit to the manufacturer was about 6 cents per quilt.

A somewhat similar quilt was sold in 1907 by the manufacturer for $71\frac{1}{2}$ cents, by the jobber at \$1, and by the retailer at \$1.50. In 1911 this same quilt was sold by the manufacturer at $67\frac{1}{2}$ cents, by the jobber at 75 cents, and by the retailer at \$1. Thus a decrease in price at the mill of 4 cents resulted in a reduction of price to the consumer of 50 cents.

A superior kind of quilt was sold ten years ago at 80 cents at the mill, by the jobber to the retailer for \$1, and by the retailer to the consumer at \$1.50. In 1911 this same quilt was sold at the mill for \$1.17, by the jobber for \$1.50, and by the retailer for \$2.50. Thus an increase at the mill of 37 cents resulted in a change of only 50 cents in the jobber's price, but raised the price to the consumer by a full dollar.

On the other hand, a fine, so-called satin quilt was sold in 1907 at the mill for \$3.25, and to the consumer, in some cases at least, for \$5. The following year it was sold at the mill for \$3 and to the consumer for \$5.

In the above examples the relation of the price which the producer receives for his commodity to the price which the consumer pays for it seems to follow no rule of logic. We have seen that in one case an increase of 10 cents at the mill was followed by an increase of 50 cents to the consumer and in another case that a decrease of 4 cents at the mill was followed by a decrease of 50 cents to the consumer, and in a third case that a decrease of 25 cents at the mill made no difference at all in the price to the consumer.

I have emphasized the problem of the relation of producer to consumer because the whole argument regarding the tariff question

hinges upon this relationship. The contest between protectionists and free-traders has been generally looked upon as a struggle between producers and consumers. The argument for protection has always been that the government should restrict the importation of foreign commodities, manufactured at a cost lower than that for similar commodities produced at home, to enable the home producer to compete on favorable terms in his own market. The argument for free trade has been that such protection has always been at the cost of the consumer who has been obliged to pay the higher prices, and that from the moral point of view this was unfair class legislation in that it taxed the many for the benefit of the few, while from the economic point of view it was unwise in that it forced the investment of labor and capital from more profitable to less profitable lines of enterprise.

This argument is clear and familiar. It is based on the assumption that each individual, if left entirely undisturbed by government regulation, will naturally seek that employment for his capital which is most profitable. Where each capitalist invests in those industries which are most profitable under the given natural conditions of the community in which he lives, it may naturally be assumed that the wealth of the whole community will be most rapidly increased. The very fact that a protective tariff is needed in order to maintain an industry in existence in a given community shows that that industry is less adapted to the character of the natural resources, or the character of the producing population, than an industry which can support itself without extraneous aid.

Protection, therefore, is supposed to be either useless or harmful. It is useless where the home producer can put his goods on the market more cheaply than the foreign producer; it is harmful where the goods can be imported more cheaply from some other country, since it induces investment in less profitable lines.

In the face of the seemingly inevitable logic of this argument the protectionists have been hard put to it to find any intellectual justification of their faith. Some of their arguments have been profound and have taken account of factors of importance which free-traders have ordinarily overlooked. Other arguments have been extremely shallow, and many of the protectionist arguments have been in conflict with one another. It is no part of the purpose of this paper to discuss these arguments except to consider the one question of the relation of tariff to price. It is well, however, to remember that when such a problem as that of the tariff becomes a

problem of practical politics the necessity of appealing to different classes of people for their support is almost certain to result in an array of inconsistencies. The free-traders are by no means guiltless in this regard. For example, an interesting illustration is to be found in the attitude of the English free-traders toward the Canadian preferential tariff. According to the free trade theory a tariff reduction should always prove beneficial both to the exporting and the importing country, and should lead to an expansion of trade which has been foolishly and artificially restricted. Mr. Chamberlain, however, had advocated preferential tariffs as between the mother country and the colonies as a practical political program. Canada had taken the lead in giving preference to English goods by reducing her tariff first by 25 per cent and then by 33 $\frac{1}{3}$ per cent on imports from the mother country. This from the free trade point of view should have been welcomed as at least a step in advance, but it now became desirable from the exigencies of party politics in England to show that there was no advantage in the Chamberlain policy, and the free-traders exerted themselves in every way to prove that, despite this reduction in favor of English goods, English trade had not expanded as compared with American trade paying a higher tariff and that, consequently, preferences of this kind had proved themselves of no advantage. The obvious retort is: If this was true, why advocate reduction at all?

It is hardly necessary to point out that the most common and obvious inconsistency on the part of the free-traders lies in their maintaining in controversial arguments at one and the same time that protection is not needed in order to maintain a given industry and that the result of protecting such an industry is to divert labor and capital into less profitable undertakings. One charge may be true of one industry and the other of another. They can not both be true of the same industry at the same time.

The great inconsistency, however, in the minds of most people, has been that of the protectionist party in this country, which, after advocating the necessity of protection because of the inability of the producer to meet the competition of foreign cheap goods, was obliged to face the ire of the consumer who said that he wanted his goods as cheap as possible and preferred to buy them from the foreign manufacturer rather than pay tribute to the domestic manufacturer. Consequently, the protectionists felt forced to reply that under a system of protection domestic goods could be

purchased as cheaply as foreign goods under a system of free trade. It was contended, in the first place, that the growth of domestic industry would ultimately lead to such competition that the home price would be reduced to the level of the foreign price. But this, of course, was not an adequate defense of a permanent system of protection. The obvious reply was that if the manufacturer had come to the point where he could sell as cheaply as the foreigner he would not be injured by a reduction of the tariff. This, in turn, was not at all satisfactory to the advocate of protection, who wished to maintain it not only as a permanent policy in general, but who wished to maintain rates after they were obviously unnecessary from the point of view of the "relative cost of production here and abroad." Consequently there arose the famous argument that "the foreigner pays the tax."

With this argument it was hoped to satisfy everybody. There was an instinctive feeling that protectionism involved a loss somewhere. If it could be shown that this loss fell upon the foreign producer and that the domestic producer gained while the domestic consumer lost nothing, an argument for permanent protection seemed to be established. But the inconsistency would not down in the minds of intelligent people. The protectionist must say one or the other thing. Either the tariff raises prices or it does not raise prices; that is, either it maintains domestic prices at a higher level than foreign prices, or it does not do so. If domestic prices are no higher than foreign prices, what is the need of protection? Obviously the protectionist has little standing ground left. On the other hand, if protection does maintain a higher level of prices for the benefit of the producer, how can he escape the inevitable conclusion that the consumer pays the price, that the benefit to one domestic class is paid out of the pockets of another?

It is just here that the propositions advanced above become vital. I mean the fact that when we talk about the price of an article in our theoretical reasoning regarding the tariff we are inclined to talk very glibly as if there were but one price for an article at a given time. The fact is, there are various prices. Not only are different producers selling the same article at different prices, but the same producer frequently sells different portions of an identical product at different prices in different markets. Indeed, strange as it may seem, he may sell the identical product at different prices in the same market. I have known cases where manufacturers have sold an article of exactly the same quality

under the name of two different grades, selling the lower-priced product when the demand for the higher-priced (and supposedly better) grade had become exhausted. It is, of course, a very common practice for producers to sell at different prices in different markets, and it is a mistake to suppose that it takes either a high tariff or a condition of monopoly to make such a price policy profitable. It is no longer to be looked upon as something unusual and to be explained as occurring only under peculiar non-competitive conditions. It comes nearer to being typical of market phenomena in general than is the competitive determination of prices on a board of trade or cotton exchange. In other words, the principle of "charging what the traffic will bear" is now a common rule of trade. We are, however, not so much concerned with such divergences of price as with the much simpler fact that at any given time for any standard article there is a producer's price, a jobber's price, and a retailer's price.

To my mind, much of the writing of economists on the theory of international trade is weakened, if not vitiated, by their failure to consider these actual facts of business life. They take hypothetical illustrations—the price of wheat in Poland and the price of linen in Ireland—and draw conclusions as to the general effects of tariff, as if these prices were single and uniform. Detailed tariff investigations make one somewhat skeptical of the theoretical reasoning on both sides of the question. When we come to consider the actual effect of any particular tariff rate, we find that frequently, for quite unexpected and sometimes inexplicable reasons, a similar tariff seems to operate in very divergent ways in different cases. The problem is far less simple than it appears on its face.

What was said about bedquilts applied only to domestic goods and had no particular connection with the tariff question. It is now obvious what the tariff application would be. Just as a reduction of 25 cents in the mill price may have no effect on the consumer's price, so it is quite possible that a reduction of a tariff by 25 cents, even if it forced the producer to sell by that much less, would have no effect upon the consumer. On the other hand, just as an increase of 10 cents in the mill price led to an increase of 50 cents to the consumer, so it is quite possible that an increase of the tariff by the amount of 10 cents might increase the consumer's price by 50 cents.

The point of theoretical interest lies here—that if any sound

economic argument for the permanent maintenance of a certain scale of protective duties can be made, the germ of it will be found, I believe, in this consideration of the relation of producer to consumer. Indeed, it may be that after a consideration of facts of this nature we shall have to admit that what seemed hopeless inconsistency in the protectionist's position is not so hopeless after all. We left him on the horns of the dilemma raised by the question, "Does the tariff raise prices or does it not raise prices?" If he replied in the affirmative he was met by protests from the consumer. If he replied in the negative he was met with derision by the free-trader, since there would be no object in a protective tariff if it does not "protect." Is it not possible to reply now that conceivably a protective tariff can be so arranged as to raise the producer's price while not increasing the consumer's price? Through our peculiar method of distribution, of which more will be said later, there is a wide margin between the price which the maker of an article gets and the price which the user of an article pays. The protectionist might assert that his object was merely to reduce this margin, to secure to the producer a somewhat higher price than he would be able to get without the tariff, but to take this increase out of the margin between producer and consumer, without laying any additional burden upon the latter. If, as above suggested, the tariff question represents an issue between producers and consumers, here might seem to be the possibility of a greater harmony. After all, the chief demand on the part of the public for tariff reduction in this country has been not from theoretical consideration, nor from the widespread belief that capital has been diverted into unprofitable undertakings, but simply from the general conviction that the tariff has increased the cost of living to the ultimate consumer. Now this ultimate consumer is simply concerned with one particular price, namely, the price which *he* has to pay. He is not concerned with mill prices or jobber's prices, but merely with retail prices. On the other hand, the producers, in their advocacy of the tariff, are not concerned with the price paid by the consumer. They would be glad to have the consumer get his goods as cheaply as possible, provided the mill price of goods is enough to yield them the desired margin of profit.

Take, for instance, such a case as the cotton industry. It should be remembered that the difference of half a cent a yard on many fabrics means all the difference between profit and loss to the manufacturer, whereas, on the other hand, that difference of

half a cent a yard at the mill may have no effect on the consumer. On the basis of these facts a theoretical argument may be made in favor of protection, to this effect: that a moderate amount of protection would enable many large established industries to maintain more active and profitable business and a greater continuity of employment, and yet not throw any proportional burden upon the consumer.

This proposition can be illustrated by actual cases in detail. There can be no question that the retail prices of cotton goods in this country are higher than in England, and most people have attributed this to the fact that the tariff enables the manufacturer to charge a higher price. The report of the Tariff Board on this industry was somewhat of a revelation even to the manufacturers themselves regarding relative producer's prices in this country and in England.

In the list of 100 samples of cotton goods, running all the way from cheap cotton duck to fine tapestries, it was found that in 37 cases the American manufacturer was selling at a lower price than the English manufacturer. Twenty-five of the 100 samples were printed cloths, including challies, lawns, percales, organdies, batistes, and so forth. Of these 25 samples it was found that 10 were selling lower at the mills in the United States than in England; 13 were selling at higher prices in the United States; and for 2, English prices could not be obtained. On the other hand, in all these cases the American consumer was paying more, and often much more, than the English consumer. Obviously, in the cases of those goods selling as cheaply at the mill in this country as abroad these higher prices to the consumer could not be the result of the tariff. Under conditions of perfect free trade, the jobber would still have been able to get his goods cheaper from the American manufacturer than from the English manufacturer. There would have been no occasion for importations. The higher prices to consumers are to be explained by our method of distribution and the much wider margin between manufacturer and jobber, jobber and retailer, and retailer and consumer in this country than abroad.

One of the most effective causes of this situation is to be found in the existence of so-called set prices in the trade; that is, there are for ordinary cotton goods certain customary or fixed prices which admit of no intermediate prices. If the retailer can not sell at the customary price he does not increase his price by $\frac{1}{2}$

cent or 1 cent a yard, but jumps the fabric into the next classification. These classes are 10 cents, $12\frac{1}{2}$ cents, 15 cents, 19 cents, 25 cents, 35 cents, with sometimes an intermediate rate of 29 cents. A few illustrations will show what I mean.

A standard printed percale sold at the American mill for $6\frac{3}{4}$ cents a yard, representing a profit of less than $\frac{3}{4}$ of a cent to the producer. It reached the consumer at 10 cents a yard. The same cloth was sold by the English mill at more than $\frac{1}{2}$ cent a yard higher than the American price, but reached the consumer at the same figure.

A staple India linon was sold at the American mill for $7\frac{1}{8}$ cents, giving a profit of $1\frac{1}{4}$ cents per yard. It was jobbed at $9\frac{1}{2}$ cents, and retailed to the consumer at either $12\frac{1}{2}$ cents or 15 cents, according to the locality. This same cloth cost $\frac{1}{2}$ cent more at the English mill than at the American mill, but reached the consumer at about 11 cents; that is, with a higher price for the English producer, the English consumer got the article anywhere from $\frac{1}{3}$ to nearly 4 cents less than the price charged the American consumer.

A printed curtain scrim was sold by the American mills at $10\frac{1}{2}$ cents a yard, was jobbed to the retailer at $12\frac{1}{2}$ cents, and sold by the retailer at 19 cents, 25 cents, and sometimes even at 29 cents a yard, according to local conditions. The same cloth was sold at the English mill for slightly over 10 cents a yard, and reached the consumer at $15\frac{1}{4}$ cents; that is, although the American mill price exceeded the English mill price by only $\frac{1}{3}$ of a cent, the retail price in this country was from 4 to 14 cents higher than in England.

A particularly interesting case was a standard mercerized poplin. This sold at the American mill at $14\frac{1}{2}$ cents and reached the consumer at 25 cents. In England it sold at the mill for about 2 cents a yard less than at the American mill, but was retailed for $17\frac{1}{4}$ cents.

Another illustration is that of a typical sample of "fancy white goods" sold to the better-class trade at the retail price of either 35 cents or 39 cents in this country and at about 22 cents a yard in England. This sold at the American mill for $18\frac{1}{2}$ cents and at the English mill for $15\frac{1}{4}$ cents. Here a difference of $3\frac{1}{4}$ cents in mill price was accompanied by a difference of from 13 to nearly 17 cents in the retail price.

It is worth while to give such detailed figures as these to bring

out the fact that there is no single rule governing the effect on the consumer of particular tariff increases or decreases, even in the case of goods of similar quality. We used to occupy ourselves in the Tariff Board office sometimes, when time permitted, in figuring out just what changes would affect prices and what changes would not. I remember making a calculation on one fabric, where we started with an assumed 10 per cent reduction on an article selling for 25 cents. This showed that under the methods of distribution in the cotton goods trade the consumer would receive no benefit. The same was true of a 20 per cent reduction, a 30 per cent reduction, and a 40 per cent reduction. On the other hand, we figured that a reduction of 50 per cent would reduce the price just enough to enable the retailer to throw the article into the lower classification and sell it at 19 cents. In other words, a reduction of 40 per cent would apparently have been of no benefit to the consumer, whereas a reduction of 50 per cent would have saved him 6 cents a yard.

Take, for example, the last two cases cited from the samples of cotton goods. In the case of the standard mercerized poplin selling at 25 cents to the consumer, if the duty had been entirely removed and the American mill price reduced to $12\frac{1}{2}$ cents to correspond to the English mill price, it would still have been jobbed at $16\frac{1}{2}$ cents and would have retailed at the old price of 25 cents, giving the consumer no benefit at all. For this article to get to the American consumer at the price paid by the English consumer, the mill price would have needed to be reduced to $10\frac{1}{2}$ cents, or 2 cents lower than the mill price in England.

On the other hand, in the case of the fancy white goods, the American cost was about $11\frac{1}{2}$ cents, giving a mill profit of 7 or 8 cents a yard. A reduction in duty which would have brought the American mill price down to the level of the English mill price would still have allowed a profit of $3\frac{3}{4}$ cents a yard to the manufacturer and would have resulted in a saving of at least 10 cents a yard to the American consumer.

A somewhat different problem arises in the case of the woolen and worsted industry, where not only are consumer's prices of the products higher than abroad, but in the great majority of cases producer's prices as well. Here it may fairly be assumed that the prices of manufactures of wool have been increased to the ultimate consumer by means of the tariff. Whether this has been a wise or an unwise policy as a whole is not a part of the present discussion.

It is worth while, however, to say that in such a case one can very easily draw erroneous conclusions regarding the effect on the consumer of any particular reduction of the tariff. As in the case of the cotton fabrics, referred to above, where it was shown that a reduction of 40 per cent might lead to no reduction in the consumer's price, while a reduction of 50 per cent might be a large saving to the consumer, so in the case of wool manufacturers it should be recognized that it is all a matter of degree and that it is quite possible that a seemingly large reduction, though reducing the mill price of the manufacturer, might not result in a corresponding gain to the consumer.

In the case of raw wool, we had a situation under the earlier tariff where about one third of our total consumption was imported. The protectionist legislators themselves, in arranging the duties on manufactures of wool, went on the assumption that the price of wool would be raised by the full duty. Of course, the actual importer of wool did pay the whole duty, but it would be difficult to determine how far London prices were cut for his benefit to enable him to bring the wool in over the tariff barrier. It seems to be the general opinion of wool dealers, both in England and in this country, that in general the price of similar domestic wool was raised by about half the amount of the tariff and that at certain times the addition to the price of wool in this country because of the tariff was even less. It was a common statement in the trade four years ago that wool was already selling "on a free trade basis." Such a condition was, however, exceptional, and we may fairly assume that the former duty on wool materially raised the price of the article to the purchaser. On the other hand, it would be going too far to say that the price of domestic wools in the grease was normally higher than for similar grades in London by the full 11 cents per pound.

This schedule offers one of the most interesting illustrations of the cumulative effects of a tariff. Not only did the producer have to pay for his raw material, but, so far as the worsted industry was concerned, nearly all of the machinery, up to the process of weaving, was imported. This machinery paid a duty of 45 per cent, and that, together with extra charges, forced the American manufacturers to start with a higher investment in machinery by something like 65 or 70 per cent. The duties on the manufactures of wool, due to the allowance made for the duty on raw wool, were in many cases absurdly high. But even with all these conditions,

the prices of woolen goods in this country were not raised by anything like the full amount of the duty. The Tariff Board made a calculation on 16 typical cloths of low and medium grade, on which the average rate of duty was 183 per cent, while the price on these goods as compared with similar goods in the English market was about 67 per cent higher. This particular calculation has become somewhat prominent in the discussion of this problem by economists, but the average figure, 67 per cent, should, of course, be taken with due caution. The extent to which the American price and the English price of similar fabrics diverge is extremely various, and frequently the divergences are difficult to understand. In the case of a number of suitings, the American price is about 45 or 50 per cent more than the English; while in other cases the divergence runs well above 67 per cent. To illustrate the point I desire to bring out in this paper, it is only necessary to take some one specific difference. Further calculations can be made at will as to the probable effect of reductions in tariff rates on the basis of other differences which may be assumed.

The question may then be asked, what will be the effect of the actual change made in the duties on woolen and worsted goods upon the price paid for clothing by the ultimate consumer. Of course, people who are accustomed to go to England for their clothes will feel an immediate relief. The present duty on clothing is 35 per cent, whereas formerly in bringing our custom-made suits into the country we paid 75 to 90 per cent and sometimes even more. To such people the saving is direct and obvious.

The great mass of people, however, do not go to London for their clothes and do not even go to tailors for them. They buy ready-made suits from the retailer. Here comes in that factor of the great gap between producer's prices and the consumer's prices which is likely to absorb any benefit which the reduction in the tariff would otherwise bring. Of course, if foreign countries should develop a great ready-made clothing industry to meet the demands of the American market, the consumer would realize a great benefit. It is not impossible that this will prove to be the case, but I am very skeptical regarding it. As yet at least, there is no sign of the foreign producer being able to meet the tastes of the American public or to develop the ready-made clothing industry, which is, after all, a distinctively American enterprise.

In this case the question arises, whether the consumer of ready-made clothing in this country will gain much, if anything, from a

reduction of duty on the material. Retail trade is determined very largely by custom. Prices are fixed at certain customary points. There are \$12.50 suits, \$18 suits, \$23 suits, \$35 suits, and so on. Here again the problem of price changes is largely a question of detail rather than of general theory. I shall venture some further very specific figures to illustrate the point.

Besides investigating costs and prices in the matter of wool and the manufacture of cloth, the Tariff Board made a study of the ready-made clothing industry and the relation of the prices of clothing to the tariff. Among other things, they took a number of actual typical suits and traced the prices and costs from the price of the suit on the consumer's back to the cost of the wool on the back of the sheep. Let us examine a typical case.

The old tariff was 11 cents a pound on wool, and on cloth was 44 cents a pound plus 55 per cent. The new act provides for free wool and a rate of 35 per cent upon cloth. How should these changes affect the consumer? The first example given by the Tariff Board is that of a fancy worsted suit for which the consumer pays \$23 or more. To make this suit it took 9.7 pounds of half-blood Ohio wool, for which the wool grower received \$2.23. Even if we assume that this price of Ohio wool included the full amount of the former duty and that the consumer would get the full benefit of any reduction, it will be seen that the saving on a \$23 suit would be only \$1.06 on account of the removal of the tariff on wool.

If, on the other hand, the price of domestic wool was not normally raised by the full amount of the old 11-cent rate but by (say) $5\frac{1}{2}$ cents, the reduction in the cost of the raw material on such a suit would be only 53 cents. Whether so small a reduction would redound to the benefit of the consumer or be absorbed in the process of distribution is, of course, something that could be finally determined only by experience. It is not by any means to be assumed that the consumer would get his suit 50 cents cheaper. On the other hand, if the consumer's price were reduced at all it would probably be reduced by more than the 50 cents because of the fact that the suit would be thrown into a lower-priced class.

More directly illustrative of the point under consideration is the question of the effect of the change in duty on cloth. The analysis by the Tariff Board further shows that this 9.7 pounds of wool was turned into 3.6 yards of cloth, of which the cost of manufacture was 44.2 cents per yard. Adding to this the cost of

the wool, 82.3 cents per yard, the total cost of the cloth was \$1.265 per yard; and the selling price to the clothing manufacturer was \$1.328, giving a margin of profit to the cloth manufacturer of about 6 cents per yard, or 23 cents on a suit costing the consumer \$23. The total cost of making a suit was \$14.32, of which \$7.55 was for cloth, linings, and trimmings, and \$1.90 for selling expense. The regular wholesale price of the suit was \$16.50; the net price, after deducting discount, \$15.39. This was the price paid by the retailer, who then sold the suit to the consumer for \$23.

Consider now the effect of a change in the tariff on woolen cloth. The total cost of the cloth in this suit was \$4.78. From other figures given above, assume this to be higher than similar cloth purchased in England by 67 per cent. Then the English price would be \$2.86 for the 3.6 yards. Under the Underwood rates the duty on such cloth would be 35 per cent or \$1, which would bring the price, duty paid, on the 3.6 yards of cloth to \$3.86 instead of \$4.78; or a saving of only 91 cents on the suit. It may be noted that in the case of this particular fabric it was found that a very similar article was being sold in England at about $\frac{2}{3}$ of the American price. In such a case the saving on a suit would be only about 48 cents instead of 91 cents. On the other hand, of course, in the case of some suitings, the amount would be greater rather than less. Here again the question arises as to how far this saving on the cost of cloth, to wit, less than 5 per cent on the price of the suit, would be reflected in the actual price paid by the consumer. As already stated, suits sell at certain fixed, customary prices, and the manufacturer does not make a reduction of a few cents every time he is able to buy his cloth stock at a slight reduction. Still less does the retailer. The mere fact that the clothing manufacturer could get his stock somewhat cheaper from the English cloth manufacturer than from the American does not necessarily mean that the price to the consumer would be reduced. As already suggested above, if any reduction were made, it would probably be greater than indicated by the actual saving in duties, due to the fact that the suit would now be thrown into a lower retail class. Such questions are questions which, in one sense, can be finally determined only by the test of experience. On the other hand, any one thoroughly conversant with the range of mill prices, jobber's prices, and retail prices over a period of years, can probably predict the change with a fair degree of

accuracy. The difficulty would be great only where the price fell near the margin between two classes.

It may, perhaps, be better without drawing any definite conclusions, to leave to the reader the above detailed examples of the complexity involved in the problem of the effect of tariff duties on prices, when we put aside general theorizing on the incidence of taxation and attempt to determine the actual result of any particular rate on any particular commodity under actually existing conditions. Indeed, the object of this paper is to state the problem and emphasize its complexity, rather than to solve it. It aims to show that a solution of practical value can not be secured by reasoning from a set of imaginary conditions, but only from a study of infinite detail. This is not meant to minimize the importance of sound theoretical reasoning in the field of economics; only to insist that the application of such reasoning to practical legislation in tariff matters should not be made too cavalierly, or with disregard of the facts of our distributive system which are sometimes as inexplicable as they are stubborn.

Brief reference must be made to two obvious objections that may be raised. It may be said that however many peculiar cases may be cited, the whole system of protective tariffs must generally tend to maintain a higher level of producer's prices in the protected country, and that *in the long run* these must tend toward higher consumer's prices. Nothing in the above article is meant to controvert this view, although there may be cases where protection by stimulating the development of new resources may work toward lower prices of raw material. The point is of primary importance if we wish to consider the theoretical question of "free trade versus protection," or to discuss the comparative results which would arise from the choice of one policy or the other on the part of some imaginary country without a past history in this regard. The present article is intended, however, as a contribution to the intensely practical question of the probable effect of actual tariff changes in this country. In the first place, we have our existing systems of manufacturing and distributing as they are—the products of more than a century of past policies. In the second place, no political party proposes a change to actual free trade. The present Democratic tariff, like those of the past, is a protective tariff. True, it may be levied with no ulterior intentions other than raising revenue. So long, however, as it levies duties on thousands of articles which compete with domestic products, it has just as

important effects, one way or the other, on the interests of both producer and consumer as any Republican measure. Mr. Underwood's theory of a "competitive tariff" seems identical in principle with Mr. Taft's theory of a tariff "to equalize costs of production." The difference is one of degree. As a Democratic member of the Tariff Board used to say, "It is all a question of the amount of free-board." The deck may be left free, which in smooth waters would make no difference. It may be "protected" to any degree desired against the possible waves of foreign competition. Therefore, since the practical problem is not whether we have free trade or protection, but whether we shall reduce the duty on clothing to 35 per cent or to 25 per cent ad valorem, the considerations offered above are of great practical importance. The former rate might conceivably not change consumer's prices at all; the latter might bring about a substantial fall. The higher rate might force manufacturers out of business as effectively as the lower rate, but without the compensatory gain to the consumer. Surely these are questions worth the attention of tariff students whether economists or congressmen.

The second objection that might be urged is that to advocate the framing of tariff legislation with reference to the considerations here suggested is merely a "counsel of perfection." It may be claimed that the complexities are so great, and conditions change so rapidly, that it is impossible to secure a sufficiently accurate knowledge to be of practical use. I may confess that when first undertaking the work assigned to the Tariff Board, I was somewhat skeptical in this regard myself. Through experience, however, I became thoroughly convinced that within a reasonable time such information could be secured, which if not complete, would be at least adequate for the purpose. The only other alternative seems to be to choose between the ultra protectionist position, that each increase in a tariff rate is a good in itself, and the extreme opposite view, that every reduction is a good, however illogical in its relation to other rates. If the other is a counsel of perfection, this is surely nothing better than a counsel of indolence. There has been much ridicule heaped upon the idea of a "scientific tariff"; and justly so if the word "scientific" is supposed to be used in its strict (or "scientific") meaning. Certainly no member of the late Tariff Board ever ventured the opinion that it would be possible to devise a scientific tariff in this sense. But it should be remembered that the phrase has been loosely used by politicians and business

men simply to indicate tariff legislation based on an intelligent and impartial study of the probable effects of proposed changes on producer's prices, on consumer's prices, and on revenue. It is not a question of a "scientific" tariff, but of an *intelligent* tariff—that is, a tariff so arranged as to bring about the results really intended. Surely it is important to know that in the case of one commodity a given reduction will probably force the home producer to sell below cost without reducing the price to the consumer, while in the case of another commodity the same reduction will bring about a material fall in the consumer's price while still leaving a living profit to the manufacturer.

If we are to continue long, as now seems certain, our present tariff system with duties on thousands of articles produced at home it is obvious that an intelligent tariff, even where primarily for revenue, should be so designed as to give the greatest aid to the home producer with the least cost to the consumer—or to put it conversely, the greatest gain to the consumer with the least disturbance possible to profitable business. To do this requires a careful and detailed analysis of marketing conditions and of the relation of producer's and consumer's prices. Such a study is not at all outside the lines of the possible or even the practical.

At best, a tariff must be a matter of pretty rough adjustments. Scientific accuracy is of course a chimera; but this does not mean that a fair appreciation of the results of tariff changes should not be attempted, or that a decent approximation to this end can not be made. Such efforts, to be of value, should be not sporadic but continuous. Fortunately they are cumulative in their results, so that each successive year would make the task easier, the results more certain. No one who has observed the work of the permanent officials of the departments of Commerce and of Finance in Vienna, for example, in their detailed study of the economic effects of tariff rates, can question this fact.

HENRY C. EMERY.

Yale University.

SUPPLEMENTARY NOTE. It is not possible to discuss in detail the relations of the above article to Taussig's *Some Aspects of the Tariff Question*, which appeared after the article had been written. It is only hoped that it will be accepted by Professor Taussig and by the reader in general as written with something of the same patient regard for concrete realities which characterizes that work, and in harmony with his method of treatment, even if not agreeing with every detail of

his conclusions. The writings of Professor Taussig on the tariff form a conspicuous contrast to much of the general discussion of the question as criticised in the foregoing pages. In his new volume he not only continues in brilliant manner "the direct investigation of particular cases"—which he calls "the only method applicable to this sort of economic inquiry"—but he sets an example to all economists in his frank willingness to modify earlier conclusions on the basis of a more detailed study of business facts. Indeed, any writer who never finds any errors in his first conclusions as to particular tariff effects is more probably afflicted with blindness than with infallibility.

The present article may in a sense be considered an appendix to his first chapter, entitled Duties, Imports, Prices. It would be difficult to compress into such brief space more sound analysis combined with clear recognition of facts. It does not, however, include a consideration of the specific factor so much emphasized above, namely, the difference between producer's price and consumer's price. Perhaps this factor was considered by Professor Taussig and discarded by him as non-essential. The present writer, however, makes bold to believe that this is just what is necessary to round out and complete the analysis, both in that general chapter and in its later applications. It will be seen that on some points there are differences, but these are rather as to the evidence of facts than of theoretical interpretation. Thus, Professor Taussig takes it as assured that the price of domestic wool under the old tariff was raised by the full amount of the duty, while in the above article importance is attached to what was a widespread "opinion of the trade" that the price was often higher by only one half the amount of the duty. However, on this there was no unanimity of opinion. I found the view quite commonly expressed by English dealers. Doubtless there are divergences from year to year. In any case, I am confident that Professor Taussig would agree with me that the question must be determined in the market place and not in the study.

A similar problem arises in the case of sugar, although the subject is not discussed in the present article. Professor Taussig takes sugar as the instance *par excellence* of continuing imports over a duty which raised the price of the domestic product by the full extent. He gives a balance sheet for the year 1909-10, showing the loss and gain to the government, the producers, and the consumers. The method of computation seems entirely proper, barring perhaps the assumption that the price was increased by $1\frac{1}{2}$ cents rather than by the actual amount of the duty on Cuban sugar. The interesting question is whether a new era was reached about 1913. It was claimed by shrewd (if interested) students of the situation that in that year conditions had so changed that the price of domestic sugar was higher than the foreign price by less than even the reciprocity rate on the Cuban product; and also that a new situation had arisen which would bring the sugar industry under the category considered by Professor Taussig on page 16. That is, it is not *a priori* certain that all the things we have rightly said about sugar prices and the tariff in the past will continue to be applicable indefinitely.

Reference has been made in the above article to price-making practices ordinarily dismissed as "abnormal." These are discussed by Professor Taussig with a clear grasp of market actualities. He goes far in recognizing the permanence of such seemingly disturbing factors, though the present writer will doubtless appear even more extreme. Whether there is a real divergence on the question of how far continuous dumping involves a monopoly element depends on the definition of monopoly. For example, I should take as a typical case a small Kansas miller selling flour in Glasgow cheaper than in Kansas City. Here neither tariff nor monopoly in the ordinary sense figures in the problem. If, however, the monopoly conception is held to include all cases where a dealer has a certain customary or personal hold on a *part of his market*, and has to fight by cut prices for *another part*; then it may be admitted that monopoly and dumping go together. But in that case monopoly is not the extraordinary, but the typical, condition.

I have claimed for myself some of Professor Taussig's patience in the analysis of specific facts. I can hardly claim it, after what has been said in the body of the article, regarding the ordinary theory of competitive price. He continuously and fearlessly modifies it and limits it as each new complexity appears. I have been so impressed by exceptions and complexities that I have suggested disregarding the old theory till we have made a new inductive study of price phenomena as they appear in the actual markets of the day.

H. C. E.

AMALGAMATION OF RELATED TRADES IN AMERICAN UNIONS

While the radical industrial unionists, who favor combining all crafts skilled and unskilled in an industry, have been engaged in controversy with the conservative trade autonomists who oppose this policy, a gradual evolution has been taking place in consequence of which craft unions are disappearing. Of one hundred and thirty-three national unions, most of them affiliated with the American Federation of Labor, only twenty-eight may be called craft unions, if by a craft we mean work requiring identical skill and training. Nor do these figures tell the whole story, since about one half of the twenty-eight craft unions are coöperating through loose alliances with other related trades in the same industry. Yet the disappearance of the craft union does not necessarily prove the ultimate victory of the industrial union. Only five of the national unions claim jurisdiction over all trades in an industry. The remaining one hundred are of an intermediate type. They unite only part of the trades in an industry. We shall call them amalgamations of related trades.

The history of American unionism reveals, indeed, an occasional tendency towards disintegration of related trades. Between 1889 and 1902 the printing-pressmen, the bookbinders, the photo-engravers, and the stereotypers and electrotypers seceded, one after another, from the International Typographical Union and formed separate organizations. More recently the window-glass cutters and flatteners have broken away from the window-glass workers' union. But such instances of disintegration have been comparatively rare. Moreover, crafts which were once united, and later became disunited, as for example in the boot and shoe industry, have sometimes been brought together again. Much more frequent has been the amalgamation of related trades by the combination of existing unions, by the extension of the jurisdiction of a craft union to include unorganized crafts, or simply by the retention of membership in the original organization as the craft has split by division of labor into several crafts.

The amalgamation of related trades has been taking place in the United States almost ever since national unions began to appear. The machinists and blacksmiths, who were united in the same union as early as 1859, managed also to bring the boiler-makers into their

organization before it went to pieces in 1877. The Sons of Vulcan, composed of iron-boilers and puddlers, united in 1876 with the National Union of Iron and Steel Roll Hands and the Associated Brotherhood of Iron and Steel Heaters, Rollers, and Roughers of the United States.

The number of such amalgamations has increased greatly since 1894. As division of labor has become more minute, trade barriers have become less rigid, and differences of skill have been lessened. Hence the newly created crafts—if we can still so call them—have not only held together but have also affiliated themselves with other crafts in the same industry. Integration of industry has been another factor. Workers engaged in different parts of the industrial process have been brought together under a common management and have combined in order to coöperate for collective bargaining. Between 1894 and 1904 the various unions of boot and shoe-workers coalesced as did also those of the hatters and of the textile-workers; the union of furniture-workers combined with that of the machine woodworkers; the Iron Molders' Union absorbed the core-makers; and the union of coal-hoisting engineers was merged into the United Mine Workers. The period witnessed the rise of the Amalgamated Meat Cutters and Butcher Workmen with its minutely subdivided groups of workers, skilled and unskilled, in the meat-packing houses. During this decade, also, the United Brewery Workmen, the United Mine Workers, and the Western Federation of Miners embarked on their policy of industrial unionism and attempted to bring into their organizations all kinds of workers in the industry.

During the ten years since 1904 the movement towards amalgamation of related trades has been accelerated by the rise of the Industrial Workers of the World. Both of the labor federations which bear this title¹ require that each national union affiliated with it shall embrace all workers in an industry. The growth of these two labor federations has undoubtedly stimulated the American Federation of Labor to pursue a more liberal attitude towards trade amalgamation and industrial unionism. The attitude of the dominant faction in the American Federation of Labor has, indeed, sometimes been misstated. The term "trade autonomists," which

¹One of the associations known as the Industrial Workers of the World has headquarters in Chicago and the other has headquarters in Detroit. The latter broke away from the parent organization in 1908 to form a rival federation bearing the same name.

is applied to them, is also misleading. They oppose industrial unionism. But not even the most conservative of the older labor leaders who cling to the traditions and methods of the past would desire to rip apart the existing amalgamations of trades nor to forbid all fusion of craft unions in the future. They favor the amalgamation of closely related trades, but are inclined to broaden very slowly their interpretation of the words "closely related." They have been especially reluctant to encourage the absorption of unskilled workers by an organization of the skilled, or to sanction the distribution of a craft employed in several industries among a corresponding number of industrial unions.

In times past the American Federation of Labor has been opposed to certain alliances of related trades, notably the International Building Trades Council. It opposed the latter organization, not because it objected to such coöperation between related trades, but because the International Building Trades Council refused to affiliate with it and yet was settling jurisdictional disputes in the building trades, maintaining sympathetic strikes, and fulfilling other functions which were being performed, in part at least, by the American Federation of Labor. The president of the American Federation of Labor made a sweeping assertion at the convention in 1901 regarding this conflict of function. "There is nothing," he said, "for which the International Building Trades Council can declare which has not been more effectually exercised and more clearly achieved by the American Federation of Labor." Such a statement is an exaggeration, since the group of related trades has interests in common which a general labor federation will not promote. Nevertheless, the allegiance of some of the national unions of the building trades was very probably weakened by their greater interest in the independent federation of the trades in their own industry. The American Federation of Labor contented itself at first merely with opposition. A more constructive policy was inaugurated in 1903 when the Metal Trades Federation, composed of machinists, blacksmiths, pattern-makers, iron-molders, and other metal trades, was made a department of the American Federation of Labor. Subsequently, a building trades department, a mining department, and a department of railway employees were created. Only the railway shop crafts are at present united in the railway employees department, but the ultimate purpose is to combine all railway employees.

Recently, the party in control of the American Federation of

Labor has shown a tendency to pursue a more liberal policy regarding the organization of the unskilled. This is illustrated by the efforts to form unions of migratory and other unskilled workers and by the sanction given in 1912 to the plan of the shingle weavers to include all workers, skilled and unskilled, in the lumber industry.

The majority in the American Federation of Labor are still opposed to industrial unionism. For some time, however, there has been a steadily increasing minority desiring industrial unionism, and at recent conventions of the general labor federation they have maintained a strong though unsuccessful fight for the adoption of resolutions favoring that method of organization.

Should the amalgamation of related trades include all or only a part of the crafts in an industry? Should the government by which such related trades are united be a centralized amalgamation practically identical with that of the national craft unions which it replaces, or should it be a loose alliance or federation in which the national craft unions continue to retain their existence? To answer these questions we must consider first, the reasons for uniting related trades; secondly, the relative advantages and disadvantages of centralized amalgamations and loose confederations; and, thirdly, the kinds of related trades which have tended to unite.

An important reason for uniting a group of related crafts has been the need of coöperating to maintain strikes against a common employer. Strikes are much more effectual if all wage-earners in industrial establishments, including many not affected by the dispute, may be ordered to quit work simultaneously. When the great strike in the meat-packing houses of Chicago was declared in the summer of 1904, the stationary engineers and stationary firemen, who have separate organizations from the other employees, remained at work. Had they quit, the strike would not have failed, say the leaders of the Amalgamated Meat Cutters and Butcher Workmen. With a large supply of meat in the refrigerators to satisfy current demands, the packers could view with equanimity the prospect of a cessation of work for many days. But if the stationary engineers and the stationary firemen had struck and so closed down the ice plant in the refrigerating department, they would have had to make terms within a few hours. The engineers and firemen did apply to their organizations for consent to strike in sympathy with the butchers, but some days elapsed before permission could be obtained. When they did finally strike, the pack-

ers, anticipating such a movement, had already secured engineers and firemen to take their places.

Again, strikes of employees in a single department of a factory often fail because the employees in other departments can be kept busy by having the work of the strikers done in some other establishment. For example, if the compositors in a printing office declare a strike, but the printing-pressmen remain at work, the publisher may have his composition done by non-union workers in some other office, the forms or stereotyped plates being handled by his own pressmen. Employers united in opposition to the union frequently put themselves to considerable inconvenience to help one another in an emergency. It was the desire to put an end to such practices on the part of employers which led to the amalgamation of three national unions of iron and steel-workers in 1876. When the iron-boilers and puddlers went on strike, the heaters and rollers were kept at work by supplying them with muck iron made by non-unionists in other places. For this reason the great Pittsburgh strike of boilers and puddlers failed in 1875; and, because of its failure, this group of workers, highly skilled, strongly unionized, and withal much inclined to hold aloof "from entangling alliances," was converted to the plan of amalgamating all trades in the iron and steel mills into one union.²

Without coöperation between the related crafts in an industry strikes of a single trade fail because, in order to keep the plant in operation and thus remain employed, the members of other trades do the work of the strikers or instruct non-unionists how to do it. Thus, in times past, locomotive firemen have run engines during strikes of locomotive engineers; and locomotive engineers, on their part, have taught strike-breakers how to perform the duties of locomotive firemen. Undoubtedly, unions would be able to bargain much more effectively for better working conditions if the agreements or contracts of all trades in an establishment expired at the same time, if the demands of the several trades were presented jointly to an employer, and if a refusal to comply with these demands caused every employee in the establishment to quit work.

On the other hand, strikes of a single trade which can not be readily replaced are unfair to the other related trades in the industry, since such a single trade, even though composed of only a handful of journeymen, can often shut down a large plant and throw out of employment hundreds of workmen who have no voice

² *National Labor Tribune*, Pittsburgh, January 2, 9, April 10, 1875.

in the matter. One reason why the International Typographical Union wishes to retain control over the machinists in the printing office is because a strike on their part may abruptly halt all activities and throw the other workers out of employment.

Strikes of a single trade are unfair to the group which wages them, when other workers in the factory who have not helped to win the strike must share the fruits of victory. If a group whose presence is necessary for the running of a factory labors only eight hours a day, the other employees must also suspend work at the end of the eighth hour. In consequence, when the trades in an industry are organized into separate unions, one of them may bear the brunt of a long and severe struggle to secure improvements which will also benefit the others.

A group of trades which jointly produce a single article benefit greatly by uniting to boycott "unfair" firms and to extend, by means of the union label, the sale of goods made in "fair" shops. Attempts of each trade to maintain independent boycotts cause much confusion. Thus, the printing-pressmen may be urging the public not to buy the newspaper of a publisher, while the printers, to whom the same publisher has accorded excellent conditions, may be urging the public to buy it. One reason why the brewery workmen became enthusiastic advocates of the so-called "industrial union" was because of the conflict in maintaining boycotts which occurred when the various trades were organized into separate associations. Similarly, when each trade in an industry has a separate label, conflict is inevitable. Thus, if one of the trades in a particular factory is organized and the others are not, the union of the unorganized trade will object to the efforts of the organized union to extend the sale of the goods made in that factory by means of the union label. The various organizations of boot and shoe-workers amalgamated in 1895 because of the great need of co-operating to maintain a single label.³ After four trades in the printing industry had split off from the International Typographical Union, local alliances of the printing trades in each community became necessary, primarily to promote harmony in the use of the union label.

Another reason for amalgamation and federation of related trades is the movement of workers from one craft or division of a craft to another. Instances of crafts whose members are recruited from other trades are numerous. The ranks of the locomotive en-

³ *The Laster*, Lynn, June 15, 1891, p. 2.

gineers are replenished from the locomotive firemen. A railroad brakeman may become later a railroad conductor. The pressman's assistant rises to the position of printing-pressman. The cigar-maker of ability learns enough concerning the varieties of tobacco and the making of the cigar to do the work of the cigar-packer. Many carpenters and cabinet-makers enter the craft of pattern-making. In the large meat-packing houses, in the coal mines, in boot and shoe factories,⁴ and in other industries, division of labor is lessening the amount of skill required, and journeymen pass readily from one kind of work to another. Under such conditions the various groups of workers must combine to control the supply of the labor in the industry and to prevent disastrous competition for employment between members of different unions. The combination of related trades solves also the difficulty created by the refusal of journeymen who change their trade to sever their connection with the union of their former craft in order not to lose the right to its sick, death, and other benefits. Thus, many locomotive firemen after becoming locomotive engineers retain their membership in the union of the locomotive firemen. The Brotherhood of Locomotive Engineers pays benefits of adequate amount, but the average age of its members is higher than the average for the union of locomotive firemen, most of whose members are young men. Hence the death and disability rate of the Brotherhood of Locomotive Engineers is larger and the cost of maintaining its benefits is greater. Because of this additional cost, young locomotive firemen who have received their promotion are reluctant to join it. When railway conductors become too old to perform their responsible duties efficiently they are often employed by the railroad company as switchmen. These men are frequently too old to become beneficiary members of the Switchmen's Union and they insist on retaining their membership in the Order of Railway Conductors. Of course, when part of the members of a trade belong to one organization and part to another, their ability to bargain effectively with employers is greatly lessened.

Another advantage of amalgamation and federation of related trades is that it reduces the number of jurisdictional disputes con-

⁴The Boot and Shoe Workers' Union adopted the following in 1904: "Members working at one branch of the trade are entitled to change to another branch, provided the local union having jurisdiction over that branch cannot fill the position with one of its members." *Shoe Workers' Journal*, Boston, February, 1904, p. 37.

cerning the right to do certain work. To be sure, trade amalgamation has caused many jurisdictional disputes as to membership, since many of the old-craft unions have waged a bitter conflict against the new industrial organizations which have attempted to absorb them. But such disputes over membership must be distinguished clearly from disputes over work which arise because of the difficulty of making clear-cut divisions of labor between the various trades which coöperate in production. Thus, not only do the masons lay granite and other kinds of stone, but sometimes they also cut them. The granite-cutters not only cut granite but sometimes they also lay it. In a small town the same man often combines the trades of bricklayer, mason, and plasterer, or those of plumber, steam-fitter, and gas-fitter. Even in large cities the bricklayer or the plumber may do the work of related trades when he can not find employment in his own. The brewer and the brewery driver must handle cooper's tools in an emergency, and the cooper in the small establishment does the work of the brewer when there is not sufficient cooperage to keep him busy. In the small retail store, clerks drive wagons and go out for orders when occasion demands. On the other hand, many a driver fills at the store the orders which he has taken during the morning and then delivers the goods to customers. Such men frequently receive a higher wage than either the driver or the ordinary clerk. The introduction of machinery, the use of new materials and new divisions of labor are upsetting carefully established trade boundaries and are giving opportunity for a plentiful supply of jurisdictional disputes. The increasing use of cement has created a new group of journeymen, the cement-workers, who are waging a war of words with the bricklayers about the right to lay artificial stone made of cement. Another comparatively new group, the ceramic, mosaic and encaustic tile-layers, are engaged in a controversy with the bricklayers as to which of them shall lay tile. The bricklayers, the tile-layers, and the cement-workers all claim the right to lay tile made of cement. Instances might be multiplied.

When two related trades are organized into separate unions, each demands a careful demarcation of its work and a strict observance of the boundaries thus set. Such a rigid division causes great inconvenience both to employer and employee and in many instances is impracticable. If after long negotiation a satisfactory dividing line is fixed, the adoption of new methods of production is apt soon to upset the arrangement. The result is an endless con-

troversy with all the disastrous consequences which follow in the trail of such internal conflicts.

On the other hand, if both trades are united in the same union, one of them may often do the work of the other without causing a serious dispute. If a dispute does arise, it can be effectively settled when referred to a common organization whose decision is final for both parties. In England, where the stone-masons and the granite-cutters are federated in the same union, there exists no controversy between them as in the United States where they are divided into separate organizations. To be sure, disputes do exist between American bricklayers and masons who are united in the Bricklayers' and Masons' International Union, but in places where such disputes have arisen, harmony has usually been restored by the committee on general good, which federates all local societies of the two trades throughout the community. If this committee can not settle the controversy it is referred to the international union, "which administers justice," says an official of the society, "and prevents another Cain and Abel episode." Jurisdictional disputes have been serious blots in the history of many American trade unions, and an important argument in favor of trade amalgamations is the possibility that they will prevent one large class of such disputes.

An objection to trade amalgamations is that, while related crafts have many interests in common, they have other interests which may diverge widely or may directly conflict. The difficulty of harmonizing these diverging or conflicting interests is increased when one trade outnumbers all the others added together, since the group having the majority is apt to use the amalgamation to further its own concerns at the expense of the others. Thus, in the United Association of Journeymen Plumbers, Gas Fitters, Steam Fitters, and Steam Fitters' Helpers, the gas-fitters and steam-fitters, who are outnumbered by the plumbers, complain that often they are not given opportunity at local and national meetings to discuss matters affecting their own trades and that when given an opportunity they are outvoted by the plumbers. They declare that most of the funds are expended in behalf of the plumbers, and that most of the legislation adopted is favorable to that trade. The stone-masons make a similar complaint against the bricklayers. The printing-pressmen and members of other trades in the printing industry affirm that they seceded from the International Typographical Union because the compositors who preponderated greatly in

numbers gave too little attention to the interests of the other crafts.

This weakness of the trade amalgamation has arisen largely from the failure to provide in its form of government for the fact that it is a federation of distinct groups. The transition from craft unions to trade amalgamations has, frequently, been so gradual that workingmen have not been acutely conscious of the need for changing the structure of their organizations. Usually, the constitution of the old-craft union has been taken over bodily, often without amendment, by the new amalgamation. In most organizations the national officers have, sooner or later, been given authority to organize each trade or division of a trade in a community into a separate local union, whenever conditions warrant; but desiring to secure the economies of the large local union, they have been slow to exercise this discretionary power. Frequently, also, each trade is given carefully weighted representation on executive boards, conference boards, and other governmental bodies. Undoubtedly, harmony between the related trades may be greatly promoted by such provisions; but, when identity of interest is slight and divergence or conflict of interest is great, some loose form of federation or alliance may be desirable.

Temporary alliances and loose federations of unions of related trades are by no means uncommon. Indeed, there are to be found all degrees of centralization from temporary coöperation for some specific purpose to complete amalgamation. Temporary coöperation usually takes the form of a sympathetic strike. Very probably there is no agreement to help one another. Simply, the union of one trade on becoming involved in a dispute with employers calls for aid from other workers in the industry, and the latter responds by agreeing to engage in the conflict. A more advanced stage in coöperation is reached when there is a definite permanent agreement to help one another. An example of such an agreement is that between the wall-paper machine printers and color-mixers and the print-cutters who make wall-paper prints. By the terms of this agreement the printers and color-mixers promise not to use prints made by non-union print-cutters, and the print-cutters promise not to work for jobbers supplying wall-paper manufacturers whom the printers and color-mixers have declared to be unfair.

Such promises of two organizations to aid one another are unsatisfactory, however, if governmental machinery is not established for the purpose of making joint decisions and taking joint action

concerning matters affected by the terms of the agreement; and this is particularly the case if the agreement provides for coöperation by means of sympathetic strikes. In the first place, unless there is a joint tribunal to decide as to the expediency of engaging in the conflict by one of the affiliated crafts, sympathetic strikes are usually ineffective. When the union of one trade notifies the other only after the struggle has begun, there is often a long delay while the request to strike in sympathy is being considered by the national officers or perhaps by each local society of the related craft. Frequently, indeed, a strike of one union is practically lost or won before the members of another union decide to quit work.

A second result of the lack of coöperation during the preliminary stages of a dispute is that it deprives one union of the opportunity to prevent inexpedient or unwise strikes desired by another. When the strike has already begun, and when the refusal to help means its failure, a strong sense of obligation may force the members of a related trade against their will to engage in the struggle.

A third objection is that unless the related trades bargain jointly with employers and make joint agreements, the policy of waging sympathetic strikes increases the number involved in each conflict without reducing the number of such conflicts. For example, the carpenters engaged in the construction of a building declare a strike for higher wages, and the members of every other trade on the building quit work in sympathy. When this trouble has been adjusted, the plumbers discover that the employer has violated his agreement with them; and all trades again go on strike. Next, the elevator constructors and the hoisting engineers quarrel as to which of them shall run the completed elevator. The other trades take sides and all building operations are suspended until the dispute can be settled. Then the business agent of the plasterers' union finds that his trade has a grievance and orders every one to leave the building. This is not a very exaggerated picture of conditions in the building industry as they existed in Chicago just before 1900 or in New York during the spring and summer of 1902. Building operations were seriously demoralized. The time for the ultimate completion of a building was a matter of gamble with all odds in favor of delay. Building contractors, landlords, and the general public joined in a chorus of protest against the arbitrary methods of the unions.

A fourth result is to place the unions in the position of breaking their contracts. Perhaps an employer has granted favorable terms

to a union which agrees on its part to maintain industrial peace for one or more years. Then this union becomes involved in a sympathetic strike to help another trade and violates its agreement. To aggravate the offense in the eyes of the public and the employer, the members of the union meddle in a dispute which is apparently none of their concern.

Coöperation between unions of related trades reaches a much higher stage of efficiency when governmental machinery is provided to carry out the terms of the agreement. Sometimes the existing officials of the contracting unions are utilized for this purpose, as for example in the "tripartite agreement" for the regulation of sympathetic strikes by the unions of printers, pressmen, and bookbinders in 1896. By the terms of this agreement, the presidents of the three international unions visited in person the place where a joint strike was demanded or sent a representative to effect a settlement if possible. When the dispute could not be amicably settled, each president referred the matter to the executive board of his own association. The three executive boards were equal in size, and a majority of the three taken together could declare a joint strike. Sometimes special governmental machinery is created to carry out the terms of the agreement between two or more unions. Thus, the wall-paper machine printer and color-mixers and the print-cutters, have created a joint national committee to control joint strikes and joint agreements in every establishment where the wall-paper manufacturer makes his own prints—in other words, where the two trades have a common employer.

Even greater unity between the related trades is attained when a permanent federal government is created, not to perform some particular function specifically provided for in the written agreement but to perform any function which the unions represented in the federation may jointly decide, from time to time, to be desirable. Federations of related trades are either local, national, or international, the so-called international unions having branches in Canada. Local federations were formed before national or international ones. Thus, while the International Building Trades Council was created only in 1897, local federations of building trades existed as early as 1882 or 1883 in New York, Chicago, Baltimore, Cincinnati, and other large cities.⁵ Movement of workers from one city to another, competition between employers in different places, and other causes which brought about the com-

⁵ *The Carpenter*, New York, May, 1882, June and August, 1883.

bination of local into national craft unions have likewise operated to superimpose national upon local federations of related trades.

National federations of related trades have been either combinations of national craft unions or combinations of both local allied trades councils and national craft unions. In the second instance, either of the two kinds of constituent bodies may predominate according to the method of representation at the convention of the national federation. Thus, at conventions of the International Building Trades Council, the local councils of allied trades outvoted the national trade unions until 1905, because each one of the two kinds of organizations was allowed the same vote. On the other hand, at conventions of the National Metal Trades Federation the national craft unions, whose voting power varied according to membership, preponderated over the local councils of related trades, each of which had only one vote. The national trade unions claim that when outvoted in federations of related trades their power over subordinate societies is greatly weakened. Prominent officials of the carpenters, bricklayers, granite-cutters, plumbers, and other building trades opposed the International Building Trades Council for this reason. Not all of the national trade unions in the building industry were affiliated at the time with the International Building Trades Council, but the local allied trades councils would still have predominated even if all of them had been represented. The national craft unions in the building industry have always been decentralized, and the ability of their central governments to control subordinate societies was still further lessened when these subordinate branches relied no longer on the central government for financial and moral support in time of strikes, but secured whatever aid they needed from local and national building trades councils. To check this tendency towards decentralization, those opposed to the International Building Trades Council organized in 1904 the Structural Building Trades Alliance, composed only of national trade unions. Local allied trades councils were not permitted representation at its conventions. In 1905, too late to prevent the successful launching of the rival federation, the International Building Trades Council modified its policy by granting to the national craft unions a voting power proportionate to membership, while continuing to allow each local allied trades council only one vote. At present, the federation of related trades, dominated by local allied trade councils, is discredited. Such local councils may

be given representation at the federal convention, but the national craft unions retain the controlling vote.

The amalgamation is the most centralized form of combination between related crafts; but, like the national trade union, it is a federation of local craft organizations, and, as already pointed out, its machinery of government is in most respects the same as that of the national trade union.

The degree of centralization desirable for combinations of related trades depends on the number of interests which they have in common and the number which conflict. The administration of their common interests grows more efficient as they become more centralized; but the opportunity for friction regarding matters of conflicting interest increases also. Thus, the government of the amalgamation is more efficient than the federation of local allied trades councils or of national craft unions. It has direct control over the local craft unions and thus can compel more prompt and faithful compliance with its commands than can the federation, which must issue orders through intermediate organizations. On the other hand, friction is more likely to arise because matters concerning one craft alone are not left to the organization of that particular craft but are considered by a joint convention or joint executive board on which all the related crafts are represented.

Before determining the kinds of related trades which should be federated or amalgamated, let us first consider the kinds which are at present actually united. Amalgamations and federations of related trades may be divided broadly into (1) those combining trades working for the same employers and (2) those combining trades working usually for different employers. Illustrations of the first are the union of employees in carriage and wagon factories, the union of employees in cigar factories, and the many other trade amalgamations whose members work together in the same industrial establishments. An example of the second would be an organization uniting the makers of hand-saws with the carpenters who use them. These two trades never have the same employers, yet the possibility of combining them has been considered.

Combinations of trades working for the same employers may be subdivided as follows:

a) Industrial unions claiming jurisdiction over every group of workers in an industry, including the unskilled and certain well-defined auxiliary trades, such as the stationary engineers, the stationary firemen, and the teamsters, who are found in many other

industries. The number of industrial unions is small. A few have recently been formed as departments of the Industrial Workers of the World. The most important of the older ones are the United Brewery Workmen, the Western Federation of Miners, the United Mine Workers, and the Quarry Workers' International Union.

b) Unions which include only part of the related trades in an industry. To this group belong most of the American unions. Auxiliary crafts found in other industries are admitted by a few of these organizations. Thus, the International Typographical Union, which embraces compositors, proof-readers, and mailers, is engaged in controversy with the International Association of Machinists concerning jurisdiction over the linotype machinists. The theatrical stage employees dispute the claim of the union of carpenters and joiners to control the stage carpenters and the claim of the Brotherhood of Electrical Workers to control the stage electricians. As a rule, however, auxiliary crafts are excluded and so are, usually, the unskilled workers. Some of the unions in this group unite only a very small proportion of the crafts in an industry. In such instances, the trades combined are usually more closely related than the others. Thus, while the various crafts in the railway industry have always been disunited, certain ones which are closely associated in the operation of trains are organized in the Brotherhood of Railway Trainmen. Similarly, while most of the trades in the printing industry are organized separately, the several groups of workers engaged in bookbinding are united in a single union, and so are also the stereotypers and electrotypers. On the other hand, some organizations in this group have acquired jurisdiction over nearly all the trades in an industry. Thus, the International Seamen's Union controls all seamen except the highly skilled marine engineers, mates, and pilots, who have refused to affiliate with their less skilled fellow craftsmen. Some organizations, such as the Molders' Union, claim jurisdiction over all except the auxiliary trades and the unskilled workers. Others include the unskilled but not the auxiliary trades. Thus, the Cigar Makers' International Union admits workers of all degrees of skill from the person who selects the leaves of the tobacco to the one who packs the finished cigars in boxes. The boast of the officials of the Amalgamated Meat Cutters and Butcher Workmen of North America is that their organization makes no distinction as to skill. The expert who strips the hide from the carcass of the steer and the common laborer who pushes a truck are both welcome as members.

But, in order to escape jurisdictional disputes with other organizations, both of these unions refuse to admit auxiliary trades.

The second broad division of trade amalgamations, namely, combinations of crafts working for different employers, contains only a few organizations. These unite chiefly trades producing certain materials and tools with trades using them. A good example is the United Brotherhood of Carpenters and Joiners which includes not only the carpenters and joiners employed on buildings in process of construction but also the machine woodworkers employed in mills where sash, doors, window frames, and other woodwork handled by the carpenters are manufactured. Another example was the now defunct American Railway Union, which included not only those engaged in railway transportation but also the car-builders. The great Chicago strike of 1894, which caused the destruction of this union, was waged to secure better conditions of employment for those engaged in building Pullman parlor cars.

Trades producing materials and tools have few interests in common with those using them. The two groups may, indeed, aid one another by means of sympathetic strikes. Thus, the carpenters may aid the machine woodworkers by refusing to use sash, window-frames or doors manufactured by non-unionists. The wall-paper machine printers and color-mixers may aid the print-cutters by refusing to use prints cut by unorganized labor. The bricklayers may aid the brick, tile, and terra cotta workers by refusing to lay brick made by non-union workers. But coöperation by means of sympathetic strikes is the only way by which such widely separated trades may help one another, and the expediency of even this form of coöperation seems doubtful. In the first place, the hostility to the strike declared in 1894 by the railway transportation workers in favor of the Pullman car builders indicated that strikes in behalf of such remotely related trades are held in much disfavor by the public even when, as in the above instance, all parties were united in the same organization. Moreover, the employers consider that they have been treated very unfairly when their employees, to whom they have granted favorable terms, strike in behalf of a trade with which neither party has any personal relations. Combination between such remotely related trades seems undesirable. If they do attempt to combine, federation or merely a written agreement would be preferable.

A small group of unions, some of which unite trades never having the same employer, are those attempting to combine all work-

ers making goods from the same material. Frequently, the manufacturers of one article do not produce other articles from the same material. Their employees compose entirely separate trades, and are never associated in the same industrial establishment with the workers on the other articles. An example was the Amalgamated Rubber Workers' Union which was composed of workers on all kinds of rubber goods, such as parts for mechanical appliances, bicycle tires, automobile tires, and rubber shoes. The men who make rubber tires for bicycles and automobiles possess no special facility for making rubber overshoes; nor do employers who manufacture rubber overshoes ever manufacture rubber goods for mechanical appliances. In fact, there is a territorial division of production. Rubber overshoes are produced largely in New England and rubber goods for mechanical appliances in other parts of the country, particularly New Jersey. The Amalgamated Rubber Workers' Union was, therefore, an unnatural combination of groups of workers having no interest in common. Its membership, indeed, was always small, and it soon went to pieces. Another example is, perhaps, the United Brotherhood of Carpenters and Joiners, which absorbed quite recently the machine woodworkers and furniture-workers, and is planning soon to include also the box-makers and wooden ship builders, and which hopes some day to have jurisdiction over all woodworkers in North America. Some of the trades which the United Brotherhood of Carpenters and Joiners seeks thus to unite possess few interests in common, and there is grave doubt whether real unity could ever be secured by such a wide-reaching organization.

The first essential for a successful combination of related trades is, therefore, that such trades have the same employers. If, in addition, such a combination admits neither auxiliary trades nor unskilled workers, its desirability will not be questioned by trade union leaders. In fact, the only debatable question is whether such an organization should be a federation of national craft unions or an amalgamation of local craft unions. If, as in the printing industry, the lines of demarcation between the trades are rigidly fixed; and, if, because one trade outnumbers the others, an amalgamation may disintegrate, as did the International Typographical Union; and if a satisfactory balance of power can not be secured by carefully weighted representation in conventions and on general executive boards—a federation may be preferable. If, as in the building industry or the railway industry, the related crafts

have been long and successfully organized into separate national trade unions, there will be much objection to the dismemberment of these associations; and the first successful attempt at combination will probably be a loose federation. If none of a group of related crafts outnumbers greatly the others, and if the divisions between trades are not rigidly fixed, so that laborers pass readily from one kind of work to another, the successful establishment of an amalgamation may be an easy task.

Two matters of long and bitter controversy that have arisen concerning combinations of trades working for the same employers have related (a) to the admission of auxiliary trades found in a number of industries and (b) to the admission of unskilled laborers. We shall first consider the method of organizing auxiliary trades. The industrial unionists favor their distribution among several industrial unions. The trade autonomists favor their combination into a single craft union. In behalf of the policy of distributing the members of an auxiliary trade among several industrial unions, it may be argued that such a craft gains much from its ability to coöperate for purposes of collective bargaining with other employees in the same establishment. Trades like the pattern-makers, the stationary engineers and the stationary firemen are especially handicapped unless the related trades aid them by declaring strikes in sympathy, for the reason that there are usually so few of these workers in each establishment that the employer can readily find sufficient non-unionists to take their places. On the other hand, coöperation for purposes of collective bargaining between members of an auxiliary craft in different industries is unnecessary. It is not even needed to maintain uniformity of wages, since such uniformity is required only between competing establishments in the same industry. In favor of combining the members of an auxiliary trade into one craft union, it may be argued that the supply of workers in a trade can be effectually regulated only when its members are so united. If distributed among several industrial unions, limitation of apprenticeship is impracticable, and there is no way of preventing the members in one industry from taking the places of fellow-craftsmen in other industries by acting as strike-breakers or by offering to work for lower wages. At the same time, the free movement of the members of the trade from one industry to another is checked by the erection of artificial barriers.

Those members of an auxiliary trade who have had to undergo additional training in order to do the work in a particular indus-

try are affected very indirectly by the total supply of workers in the craft and hence may amalgamate very profitably with other employees in the same industry. The Carriage and Wagon Workers' International Union claims that the carriage blacksmiths are specialists and hence can gain nothing from affiliation with the union of blacksmiths. The cutting die and cutter makers, who manufacture the dies used in cutting cloth, paper, leather, and other materials according to various patterns, declare that they have no interests in common with the blacksmiths and machinists, from whom their ranks are recruited. Special training is required to do this work; and, as the waste of material makes the cost of teaching new hands very high, the cutting die and cutter makers are only slightly affected by the demand for machinists and blacksmiths.

When the members of a trade require no special training for the work in each of the industries in which they are employed, a compromise seems necessary. Trade union officials have suggested that the members of such a trade might belong both to the craft union and to one of several industrial unions. Power to declare strikes and to bargain with employers could be vested in the industrial unions. The craft union could limit the supply of workers in trade and prevent individual competition for employment between them; and, if the scope of its activities were limited to these matters, there need be no overlapping of functions between it and the industrial unions.

The second question to be considered is whether the skilled and unskilled workers in an industry should be combined in the same organization. Undoubtedly the unskilled gain greatly from such an alliance. Organizations composed wholly of unskilled workers, such as the International Brotherhood of Foundry Employees, the International Association of Glass House Employees, the International Hod Carriers' and Building Laborers' Union, and the International Association of Blast Furnace Workers and Smelters are practically impotent to improve the conditions of their members. Since their work requires little or no training, strikes are useless. From the large standing army of unemployed, men and women can readily be secured to take their places. The International Hod Carriers' and Building Laborers' Union makes no mention of strikes in its constitution. In fact, the international organization pays no strike benefits and rarely declares a strike. The local societies of building laborers have derived the strength to maintain strikes and

otherwise bargain with employers from the aid which they have secured from the skilled trades by affiliation with local building trades councils. The Laborers' Union Protective Society of New York City, composed of bricklayers' and masons' helpers, has secured favorable conditions of employment for its members only through the help of the New York local unions of bricklayers which have declared strikes in their behalf and have secured the inclusion of provisions favorable to the helpers in their agreements with the contractors.

The formation of a vast organization of unskilled workers in all industries has been suggested by trade union officials. The Laborers' International Protective Union with jurisdiction over all unskilled and general laborers, male and female, was formed several years ago but never attained any real importance. The constant tide of immigration into the United States makes any effective regulation of the supply of general laborers impracticable. Moreover, unskilled workers can be kept faithful to the union only with great difficulty. During unemployment, which is very frequent among them, they are expelled for failure to pay dues, for acting as strike-breakers or for selling their labor at less than the union scale of wages. Those advocating one large organization of unskilled workers suggest the payment of sick and out-of-work benefits to prevent the members from breaking away from the union when in economic distress. But the ability of these workers with their low wages and frequent unemployment to maintain such benefits seems doubtful.

The chief hope of the unskilled workers rests in an alliance with the skilled, but the skilled gain nothing by such an alliance. On the contrary, such amalgamation entails a sacrifice since it imposes on the skilled the obligation of fighting battles in behalf of the unskilled. The keynote of the dominant unionism has been self-interest. The consistent pursuance of this policy by the American Federation of Labor and its constituent international unions has made them succeed where the Knights of Labor, with its altruistic ideals of brotherhood, failed. Following this policy, the skilled trades have refused to unite with the unskilled.

There are aristocracies even among the aristocrats. Certain trades whose members possess a higher degree of efficiency and training than do their fellow employees have refrained from entangling alliances. The exclusiveness of the locomotive engineers has undoubtedly helped to prevent the successful federation of all

railway employees. The bricklayers have held aloof from local and national federations of the building trades. The marine engineers have refused to affiliate with the International Seamen's Union. Years ago, the window-glass blowers and gatherers were reluctant to amalgamate with the less skilled window-glass cutters and flatteners. Today the situation is reversed. The introduction of machinery has greatly reduced the skill of the blowers and gatherers, and the cutters and flatteners who now possess the greater skill have seceded from the amalgamation of window-glass workers to form an independent organization. The lasters were for some years the aristocrats among the boot and shoe-workers. The introduction of machinery greatly reduced the skill of all boot and shoe-workers except the lasters. About 1885 the lasters formed a strong union while the other trades were unorganized or maintained weak struggling unions. In consequence, the lasters gained at the expense of the members of other crafts; for the employers, fearing to provoke them to resistance, permitted their wages to remain the same when reducing those of the other trades, and even secured reimbursement for increases in the wages of the lasters by imposing reductions on those of the other crafts. Similarly, the cotton mule spinners were able for many years to obtain high wages at the expense of the other unorganized groups of workers in the cotton industry.

Introduction of machinery and further division of labor have forced many of these highly skilled trades from their position of aloofness. With the replacement of the mule by the ring frame which can be manipulated by women and children, cotton mule spinning has become a vanishing craft. After 1890 the new lasting machinery greatly demoralized the lasters' unions. Certain processes could be done by boys, and one could pass fairly rapidly from the easy to the more difficult parts of the work. The lasters were, therefore, quite willing to join with the other trades in forming a single amalgamation of boot and shoe-workers in 1895.

This breaking down of the barriers between trades is bringing about, for the most part, however, only the amalgamation of groups whose work requires some degree of skill. The unskilled, who are most helpless, remain largely without effective organization. Nevertheless, as division of labor becomes more minute, as the old method of apprenticeship fails, and as the groups of skilled and semi-skilled are being recruited in an increasing number of instances by the promotion of the common laborers required for the many odd

jobs existing in every industrial establishment, the other trades are manifesting a growing tendency to admit such potentially dangerous competitors to their unions. Thus, the plumbers and the steam-fitters, the boiler-makers, the tile-layers, the blacksmiths, the pressmen, and some other trades admit their helpers to membership in their unions, because, while these helpers are not apprentices, they have opportunity to learn the trade and often become efficient journeymen. The Amalgamated Meat Cutters and Butcher Workmen of North America admits workers in the meat industry, irrespective of skill; and in 1904 all classes of employees in the Chicago packing houses went on strike to raise the wages of the least skilled and most poorly paid, the reason being that labor has been so minutely subdivided in the packing houses that the immigrant can be trained in a few months to even the most difficult of the processes. Some of those who are handling trucks and doing other odd jobs have been displaced from more skilled positions. They can slaughter and cut up the whole ox, hog, or sheep, and would be glad to regain their old positions at less wages than those now holding them are receiving. Moreover, the wages of all employees in the packing houses bear a fixed proportion to the amount paid to the least skilled. So the Amalgamated Meat Cutters and Butcher Workmen desires control over the general laborers, and declared the strike of 1904 in their favor to keep them satisfied with their present employment, and indirectly to raise the wages of the more skilled employees. Instances in which the self-interest of the skilled workers demand their amalgamation with the unskilled are still rare, however. If common laborers are admitted in the near future to unions of other workers in the same industry, they will be admitted, not from self-interest, but from more altruistic motives, from a growing spirit of class consciousness attended, perhaps, by a correspondingly growing realization of class responsibility.

THEODORE W. GLOCKER.

University of Tennessee.

REVIEWS AND NEW BOOKS

General Works, Theory and Its History

Property and Contract in their Relations to the Distribution of Wealth. By RICHARD T. ELY. In two volumes. (New York: The Macmillan Company. 1914. Pp. xlvii, 474; vii, 995. \$4.00.)

In this book Professor Ely continues his vast work in broadening the thought of American economics. Like Knies he shows the necessity of law to economic thought; like Wagner, "the social function of law." It may be too much to hope that lawyers will admit that this is the work of the American von Ihering for whom they have wished; but economists, who will be content with a reading of von Ihering's metaphysical reasoning that private property is a social utility subject to social limitation, will refer again and again to Ely in their increasing need for final and practical establishment of the same principle. At the same time, the study has adequate connection with the larger process of social evolution. The author premises "social self consciousness"; "the unconscious social forces"; and the fact that "our age is becoming one of social self determination" (p. 340). It is ungrateful to wish of one man that so vast a work should have an even deeper historical foundation.

Analysis which is based on the too narrow experience of a transitory economic stage requires revision in the light of longer history. This comprehension will be derived from the examination of that "existing socio-economic order" which has been much neglected by English and American economists to the great loss of certainty and influence of their work. Students must withstand the American discouragement of the conditions of patient and long study of history and law from which alone influential work can henceforth be done. In an economic existence in which "nothing is unchanging but change" it seems to the historical student that "dynamic factors" may be explanatory of contemporary processes rather than only qualifying. The succeeding work of Professor Ely on "Distribution," which will now be eagerly awaited, will perhaps be decisive in this changing emphasis in economic thought.

The present volumes are "parts" one, two, and three, and "fragments" of parts four and five of the ten parts of "Book

One" of the five books which the author hopes to complete in covering the subject of distribution!

The fundamental institutions in distribution are property, inheritance, contract, vested rights, and personal condition. It might be asked whether "vested interests" and the fundamental nature of all property as human relations are not so essentially similar as to suggest an analysis based on relations rather than one based on the conception of property as the "exclusive control of an economic good" (p. 101). Indeed, Professor Ely himself refers to a possible treatment starting with property in human beings (p. 273), and thinks of vested rights under the head of property (p. 53), while the emphasis throughout is upon the "social side of private property."

There are two sides to property, the individual and the social. "The social side of private property is not to be regarded as something exceptional" (p. 136). Since property has a strong tendency to develop into full and absolute control, the maintenance of this social side, in Ely's mind as in von Ihering's, "requires conscious effort." From this arises the social theory that "private property is established and maintained for social purposes." If property is a social institution, the idea of trusteeship arises, and also that power of the state called the police power, which is "essentially the power to interpret property and especially private property and to give the concept a content at each particular period in our development which fits it to serve the general welfare" (p. 207). This definition is abundantly supported with cases and facts. However, the "social theory is a conservative one because the institution finds its limitations in the social welfare" (p. 251). Private property is to be maintained for its "stimulus," for the care and excellence of management, for the "development of personality," for its "use in the satisfaction of higher social needs," for "discipline in character." "Private property is the cement of society" (p. 304). "We cannot say that property is a good thing or a bad thing without qualification or limitation" (p. 334).

The conditions that give the best results of private property are thoroughly analyzed. Elaborate rules are given for the conversion of private into public property. Modes of acquisition may be modified. Thus the social tendency is to limit speculative gains and to cut off or to limit most kinds of surplus value

(p. 395), and emphatically to regulate inheritance. From this reasoning it follows that it is desirable to maintain "the fluidity of property," the readiness of conversion between public and private forms, the ease of change in the degree of "the extensivity or the intensivity" of its content. Private property is to be "universalized." The nature and justice of expropriation is presented as a remedy for the "failure of free contract to secure the social welfare." To Ely, as to von Ihering, "the idea of expropriation is in harmony with the idea of social evolution" (p. 496).

Contract is a factor inseparable from property. Distribution is brought about more by contract than by any other force. As time goes on "economic life is more and more made up of social relations." "Public necessity, public welfare and public policy are above private contract" (p. 730).

The social theory of property and contract requires a more scientific and flexible legislation, and a judiciary with "an enlightened twentieth century philosophy."

The work is characterized by Professor Ely's customary exactness of definition, fullness of reference to other authors, and thoroughness of bibliography. Professor Orth's table of cases on property tempts the busiest student to reading the decisions.

J. H. UNDERWOOD.

University of Montana.

Welfare as an Economic Quantity. By G. P. WATKINS. Hart, Schaffner & Marx Prize Essays, XVII. (Boston: Houghton Mifflin Company. 1915. Pp. xxv, 191. \$1.50.)

Mr. Watkins, of the Bureau of Statistics and Accounts of the Public Service Commission of New York, has written an excellent and interesting volume whose title is a fair indication of its contents, though one may quarrel with his use of the word quantity. Quantity implies measurement and nowhere in the book do I find any indication of a measure of welfare. It is a study of economic consumption which shows a thorough acquaintance with authorities, especially Patten. The treatment is highly abstract even on topics susceptible of more concrete handling, but the author engages himself to make a different kind of study at a later date. Yet one must grant that the book abounds in pertinent and felicitous illustrations.

"Doubtless welfare is primarily psychical. The phrase 'an economic quantity' moreover, should be taken in a restrictive sense,

leaving some elements of welfare admittedly not economic. For the rest, we may insist that whatever is controlled by economic means and regulated by economic motives is in so far economic" (p. xxi). With such a platform the author gives an analysis of utility which is full and discriminating and a very thorough study of the law of diminishing utility (characterized by a mathematical demonstration in which the reviewer finds himself out of his depth) in which he takes issue with Patten because the latter sometimes makes its curve a straight line. In this I think Mr. Watkins has proved his point.

The most original contribution he makes is the conception of "transputed" utility which differs from the "imputation" of the Austrian school in confining itself to but one or a few of the elements of complementary utility instead of laying equal emphasis upon all the members of a group. "Transputed utility is due to a relation to other goods such that their full use and enjoyment is felt to be practically so thoroughly dependent upon the good in question that its utility is exalted and theirs depressed" (p. 14). Again, "Transputed utility may be described as monopolized complementary value" (p. 120). Like utility proper, it always has economic value.

I question the fruitfulness of this concept of transputation equally with that of imputation. There is no way in which one can measure it except by the market. Price is much more important for economics than value. There is much discussion among economists and philosophers today about value, and it is profitable discussion. Such books as the one under review and J. A. Hobson's *Work and Wealth: A Human Valuation* are interesting and important excursions into the realm of ethics, but they seem to me to be of doubtful economic importance. Economics must be satisfied to be merely a descriptive science; if, indeed, all science be not descriptive.

Mr. Watkins makes a distinction between utility and value which is common enough but, I believe, fundamentally unjustifiable. Granting that beefsteak and potatoes are food and that sawdust is not, the utility of food is based upon physiological desire. And all utility is based upon desire equally with other goods. It is because of this fact that all attempts to measure values by any other means than the market must fail. Men *are* unwise, they are infinitely different in capacity and training. The love of distinction, as Professor Taussig insists, is a powerful economic motive, and it will lead men for many centuries—probably always—to the

purchase of things which do lead to their welfare because they are pleased when they get them.

An important note (pp. 44-46) discusses the commensurability of all qualities that make goods economically desirable. The author shows a familiarity with psychological and ethical bases of value which is rare in an economist and to be heartily welcomed. The reviewer takes issue with him as to the possibility of measuring values at all in spite of the high authority quoted, and he asks, moreover, what is the pertinence of the reference to Titchener's *Elementary Psychology of Feeling and Attention* there cited. It is not readily apparent to one familiar with that study. Moreover, the attempt to apply the Weber-Fechner law of stimulation to the measurement of economic values is, I think, doomed to failure though it is made in the true spirit of science. A thorough discussion of the points at issue would require much greater space than is available here.

The remainder of the book discusses such topics as processive and existential utility, the complementary relation in general, the standard of life as a part of this, following Patten, and devotes some very vigorous pages to adventitious utility which would be of great value to the newly rich especially, if they could be brought to read them. This is admirable preaching but, like much preaching, fails of its effect because those who need it are never in church!

The reviewer claims that the economic interpretation of history and the economic construction of society must fail because men are not fundamentally engaged in either the production or the consumption of wealth but rather in realizing their own ideals. These ideals may be those of the saint, the vulgar rich, or the insolently powerful. Any of them will upset economic calculation. The average reasonable man, to whom Mr. Watkins appeals, does not exist.

For the rest, I echo heartily his closing words on democracy: "Democracy is a society of peers. A democrat is not a leveller. He would, it is true, destroy causes of artificial elevation. . . . He has no use for the lord, or the vassal or the slave. Patronalism and paternal or Tory Socialism do find places for the inferior and for natural slaves. True democracy can not." This is a book as far as possible removed from the "dismal science." It is stimulating, scholarly, and well written.

GEORGE CLARKE COX.

Hanover, N. H.

A Text-Book on National Economy for Use in the Schools. By A. G. CLARKE. (London: P. S. King and Son, Ltd. 1915. Pp. vii, 105. 3s. 6d.)

A Primer of Political Economy in Sixteen Definitions and Forty-one Propositions. By ALFRED BISHOP MASON. (Chicago: A. C. McClurg and Co. 1914. Pp. x, 101. \$.50.)

Applied Economics. By JAMES MAVOR. Modern Business, Canadian Edition, Vol. 1. (New York: Alexander Hamilton Institute. 1914. Pp. xxi, 478.)

Of the three textbooks before the reviewer, that which most positively asserts that it *is* one least deserves the name; for instead of a systematic presentation either of economic facts or economic principles Mr. Clarke's book is simply a discussion of such social questions having an economic aspect as happen to interest a high-minded, sympathetic Englishman whom the ethical impulse or economic necessity has made a teacher. The best of the book is the preface, which sets forth a method of study admirably designed to produce thoughtful men, and contains a plea for a teaching of national economy that shall not merely train a few specialists to advance the science but shall fit many to act wisely. The spirit of the book is charming, notwithstanding the fact that Mr. Clarke's apparent ignorance of, and unquestionable indifference to, the literature and accepted terminology of economics, coupled with a naïve indisposition to consider possibilities that would seriously disturb the existing conditions of English society, make the book of little value to the man or youth seeking insight into economic principles.

Mr. Mason's primer is a good American example of the brief handbooks, such as Lawrence's *Public International Law* or McDougall's *Primer of Psychology*, to which our English cousins are so much addicted. The reviewer is not familiar with the book of a generation ago from which this one has developed. Except for its recognition of the principle of land nationalization and the favor it accords trade unions, this book is somewhat old-fashioned in its viewpoint, stating with admirable clearness the fundamental principles of the classical economy.

Professor Joseph French Johnson, the editor of the Business Course to which Professor Mavor's book is the introduction, says it is intended for the wide-awake business man, but the thirty-two pages of quiz questions arranged by chapters indicate that it is intended for beginners. For such persons the style seems somewhat difficult. Dr. Mavor defines his purpose as the application

of "current economic theories to the current methods by means of which the economic processes are conducted, for the purpose of ascertaining what light these theories throw upon economic life," but it is only as a presentation of "methods by means of which the economic processes *are* conducted" that the book has value. Whatever the intention, the work is in fact descriptive rather than explanatory. Professor Mavor's wide first-hand knowledge of economic conditions in Russia, Egypt, and other parts of the world as well as in Great Britain and North America, and his admirable scholarship in economic history, make the book exceptionally valuable as a late chapter in economic history. Its value in this aspect can hardly be overstated; but less praise must be given to the author's insight into the true significance of the facts he presents.

Professor Mavor is unable to get away from the point of view of the private business man. He defends the trust simply on the ground that "it is apparently an inevitable development of the joint-stock company and is not really fundamentally dissimilar from a coöperative society." That large-scale industry and monopoly tend to lower the cost of production, and, therefore, if controlled in the interest of the consuming public, may be highly beneficial, he seems not to grasp as the underlying justification of combination in production.

Professor Mavor is ever the apologist of things as they are and the champion of the large operator. "Except in so far as [stock-watering] may be accompanied by deliberate fraud, and except in so far as it may, owing to its nature, divert capital from really productive enterprises, it can not fairly be held to be socially disadvantageous, no matter how many people ignorant of business may be involved in loss in consequence."

Professor Mavor also accepts the argument that the increase of land values with the density of population in civilized countries is disproved by the facts that in England between 1880 and 1890 *agricultural* rents fell, and urban lands have not advanced "materially" since 1876, *except in the business centers of the towns*. The reviewer wonders if, in view of the fact that personalty so nearly escapes taxation in our American cities, there would be any significance for Professor Mavor in the fact shown by the census of 1910 that the property valuation of the city of New York was greater than that of all the states west of the Missouri?

In discussing the rise of land values in Egypt, in connection with the lowering of the rate of interest, the author appears oblivious

of the significance of his admission that while the position of *land-holding* fellahin was greatly improved, that of the landless fellahin was not. Dr. Mavor appears (p. 368) not to understand that the singletaxer expects to diminish the total of land values by uniform taxation thereof and yet holds that the social productivity of the land, upon which tax-yielding power depends, will not thereby be reduced. Our author says that if the taxation of unimproved land and the exemption of improvements induces the improvement of land, the tax will then be paid by the improvement. This involves the assumption that income from improved land is wholly interest upon the capital invested in the improvement, and not in part rent from the land itself! The author apparently ignores the recent experience of the prairie provinces, especially Alberta, in the taxation of land values, the sur-tax upon unimproved land, and the increment tax on land sales.

The general make-up of the book is admirable, but the proof-reader has overlooked many glaring typographical errors.

FREDERIC W. SANDERS.

NEW BOOKS

- ANTONELLI, E. *Principes d'économie pure. La théorie de l'échange sous le régime de la libre concurrence.* (Paris: Rivière. 1914. Pp. 207. 5 fr.)
- BRIEFS, G. *Untersuchungen zur klassischen Nationalökonomie.* (Jena: Fischer. 1915. 7 M.)
- EDGEWORTH, F. Y. *On the relations of political economy to war.* (London: H. Milford. 1915. 1s.)
- HALL, H. *The elements of political economy.* (London: Pitman. 1915. Pp. 140. 1s.)
- KELLER, A. G. *Societal evolution; a study of the evolutionary basis of the science of society.* (New York: Macmillan. 1915. Pp. xi, 338. \$1.50.)
- LANDAUER, C. *Die Theorien der Merkantilisten und der Physiokraten über die ökonomische Bedeutung des Luxus.* (Munich: Steinebach. 1915. 2.50 M.)
- NORTH, C. C. *The sociological implications of Ricardo's economics.* (Chicago: University of Chicago Press. 1915. Pp. 65. 50c.)
- PEDDIE, J. T. *First principles of production.* (New York: Longmans. 1914. Pp. 231.)
- RAWIE, H. C. *Science of value; a cash market.* (New York: H. Rawie. 1915. Pp. 80. 25c.)

SCHULZE-GAEVERNITZ. "*Wirtschaftswissenschaft?*" (Leipzig: Duncaker & Humblot. 1915. 1 M.)

TAUSSIG, F. W. *Principles of economics*. Second edition. (New York: Macmillan. 1915. \$4.)

Economic History and Geography

Money and Transportation in Maryland in 1720-1765. By CLARENCE P. GOULD. Johns Hopkins University Studies in Historical and Political Science, Series XXXIII, No. 1. (Baltimore: The Johns Hopkins Press. 1915. Pp. vii, 176.)

While a graduate student, Dr. Gould began the preparation of an economic history of the province of Maryland from 1720, a date shortly after the proprietary was restored to his rights under the charter of 1632, to the time of the Stamp Act. The first part, constituting his dissertation for the doctor's degree, treated of the "Land System" and was published in Series XXXI of the University Studies. We are promised a third part, dealing with the agricultural system. The work before us is characterized by minute industry, accurate statement, and a pleasant style of presentation. The author has not only used the ordinary sources of information, but has also investigated the county court records and such private papers as the Callister collection. The monograph abounds in interesting bits of information and valuable sidelights upon eighteenth century colonial history. The two topics which are included are not often thought of as closely related, but we are told that both of them are among the influences, "which tend to bind persons together and to make possible that intercourse between man and man which constitutes trade."

The major portion of the text is devoted to a remarkably clear and definite statement of the confused and difficult subject of the "monetary system," if that can be called system which was almost a chaos. We can hardly realize the business conditions of the provincial, who usually received supplies and news from England once a year, who had no banking facilities, and who found "no less than five kinds of money circulating side by side." In addition to coin, used in "payment of personal expenses and other small debts," but smaller in amount than other currencies, use was made of bills of exchange, tobacco and other agricultural products, and paper currency. Beside these, barter was of course practiced.

We find here a chapter given to each of these mediums of exchange and each chapter is filled with facts which show the way through the labyrinth of the difficulties besetting the business of the province. We are told whence the bullion came to Maryland, what kinds of coins were current, how the value of foreign coins was fixed, what was the condition of the coins current, what was the pound currency in Maryland—a unit which had a value a third less than the pound sterling. Then we learn how the planter settled his accounts with England, and sometimes with the northern colonies, in bills of exchange, and why exchange was usually above par. The failure of tobacco to provide a good currency is explained and we are told how the price varied, although, in a rough way, custom often made a pound of tobacco equivalent to a penny. The lack of uniformity of this staple led to the passage of an inspection act of 1747, which established a system continuing until today. Although this eliminated some difficulties, the development of the north and west of the state, which grew no tobacco, caused its use as money to be abandoned about the time of the Revolution.

One of the remarkable features of Maryland's provincial finance was the issue of paper money, in accordance with acts of 1733 and 1749. A tax was laid on the exportation of tobacco and, with the proceeds of the tax, stock of the Bank of England was bought to constitute a sinking fund. The historian (p. 111) is entitled proudly to write: "Considering the peculiar benefits to grain and tobacco culture, the conveniences offered to trade, the exceptionally high exchange that the bills maintained throughout most of their life, and the faithful redemption of every shilling at face value, it is hardly too much to say that this was the most successful paper money issued by any of the colonies." The discussion of the sources of capital is illuminating, showing that it could be obtained from the colonial loan office, the surplus held by the wealthy, and advances by merchants.

No part of the work possesses a more varied attraction than the last chapter on transportation. The care of the roads was in the hands of the counties. The important routes of travel through the province are given, with regard to its geographical situation, divided into the Eastern and Western shores by the Chesapeake Bay, each shore cut up by tidal estuaries needing ferries and creeks needing bridges, while the surface of the country was covered by woods. Tobacco had to be brought to market by the "rolling roads." The

valleys of the Blue Ridge caused a separate system of communication with Pennsylvania and western Virginia. The Bay trade, the post office, the ways of spreading news, the means of entertainment of man and beast are all brought before us. We are surprised to learn that there were 845 licensed ordinaries in Maryland in 1746 and are amused at the explanation (p. 148): "In a thinly populated country, hospitality to the stranger is a prime necessity and tradition ruled that nobody should be turned away from one's door. As the law forbade the sale of food and drink without a license, any household that wished protection from the drain of a somewhat enforced hospitality was compelled to take out a license as a regular ordinary."

BERNARD C. STEINER.

An Economic History of Russia. Vol I. The Rise and Fall of Bondage Right. Vol. II. Industry and Revolution. By JAMES MAVOR. (London: J. M. Dent and Sons, Ltd.; New York: E. P. Dutton and Company. 1914. Pp. xxxii, 614; xxii, 630. 31s. 6d.; \$10.00.)

Professor Mavor has rendered a valuable service to all students of economic history, comparative institutions, and revolutionary political propaganda in making accessible in English some of the scholarly results which Russian investigators have been achieving during the past half century. Hitherto English readers have had to be largely content with such works as those of Mackenzie Wallace, Leroy-Beaulieu, Kovalevsky, Kropotkin, and Milyukov. Excellent and valuable as each of these is in its way, each fails somewhat in not being abreast with recent investigations and ideas or in not giving a comprehensive and yet detailed account of the whole course of Russian economic development. Professor Mavor, fortunately, makes familiar the views of a host of other scholars to whom he refers in numerous footnotes. In fact, his work gives the impression of being a collection of the views of many minds rather than the philosophical analysis of a single mind. It suffers at times from an excess of detail which obscures or buries the vital points.

In the first volume the author begins with a sketch of the early economic and political development of Russia to the middle of the eighteenth century. Following closely Kluchevsky's recent work, he describes the Russians in their early home on the northern slopes

of the Carpathians, their spread northeast toward their final political center around Moscow, and their considerable trade along the great rivers which flow into the Baltic and the Black Sea. As to the origin of serfdom (I, 55-95) he rejects the commonly accepted idea that it was established by the celebrated ukase of Boris Godunov in 1597. For this ukase did not declare any *general* binding of the peasant to the soil; it merely directed the compulsory return of peasants who had run away during the five years between 1592 and 1597; it was retrospective and not intended, apparently, to apply to peasants who should run away in the future. Rent contracts of peasants with landowners in the seventeenth century were still expressed in the same terms as those in the sixteenth century; there was still the same provision that before the peasant's going away he must settle with his landowner in regard to all the obligations in his contract. Thus his freedom of movement was still evidently assumed after 1597, and was in fact frequently exercised. Boris Godunov, therefore, according to Mavor and Kluchevsky, did not effect in 1597 any radical change in law or in practice. The true origin of serfdom, or "land-bondage," is to be sought in an increasing deterioration of the peasantry from the fifteenth century onwards. This was partly due to the *krugoviya poruka*, or mutual guarantee, the collective responsibility of the peasants for taxes. This existed at first on the state domains and was then gradually extended to the domains of the nobles. Deterioration of the peasantry was due also to the increasing agricultural burdens which landlords were exacting in the sixteenth century and to the increasing governmental and police powers which the state was allowing landowners to assume and exercise.

Peter the Great's industrial and financial reforms are well described in considerable detail. Professor Mavor has a more favorable view of Peter than Milyukov and some recent writers. "Peter was cast in a mould greater than that of the greatest industrial and commercial leaders. The masters of finance and of the industrial combinations of our time are mere pigmies compared with the gigantic, if sometimes sinister, figure of Peter the Great" (I, 163).

A long analysis of agrarian conditions from the middle of the eighteenth century until 1861 (I, 185-330) and a short account of Slophism and the literary influences inimical to serfdom (I, 352-356) pave the way for a detailed statement of the numerous reports and committees through which the difficult question of serfdom was

dragged until emancipation was finally accomplished. The last third of the first volume contains a fresh and interesting description of Russia as an industrial country during the same period from the middle of the eighteenth century until emancipation.

The second volume is virtually a history of the revolutionary movement in Russia. The author is evidently more interested in the growth of political revolution than in the history of economic conditions, if one may distinguish two things which are so closely interrelated as these in modern Russia. It is characteristic of his attitude that he begins this volume with a long—and excellent—chapter on the great Pugachev Peasant Revolt, the significance of which “lay in the fact that it was really a revolutionary movement” (II, 61), and he is content to lay down his pen after describing the revolution of 1905 and the first concessions wrung from autocracy by the people. “Nihilist” is a term which Professor Mavor does not use, but the activities of the men whom western Europe has been wont to call Nihilists are fully described in interesting chapters entitled *The V Narod Movement*, i.e., the movement of enthusiastic intellectuals “among the people” to enlighten and stir up the peasants, and *Narodnaya Volya*, i.e., the people’s will, which was to be brought about by terrorism and assassination. In the following chapters on the rise of the social democratic and the social revolutionary parties, on Jewish pogroms, on *agents provocateurs* like Zubatov, Gapon, and Azef, on the censorship of the press and on the general strikes which finally brought the Manifesto of October 30, 1905, there is a great deal that is new, interesting, and significant of the devious and deceitful ways of the autocracy.

There are also some descriptions of peasants, landlords, and agrarian conditions at the close of the nineteenth century based on the author’s personal observations; and likewise some chapters on industrial conditions from the workingmen’s point of view, as to wages, housing, factory legislation, labor unions, and the agitation for an eight-hour day. There is nothing about Russian finance, very little about railroads and the tariff, relatively little about the great growth of capitalistic industry since about 1890, and provokingly little about the great agrarian change which has been taking place with the break-up of the *mir* and the establishment of peasant proprietors. To be sure, Stolypin’s law of November 22, 1906, encouraging the change from collective to individual ownership of agricultural land is discussed in a chapter, but not very

clearly or sympathetically, and no figures are given to show how it is working out.

Each volume is provided with a full and very convenient index of both names and things. Dates are ordinarily given according to Old Style, although the reader is not usually warned of the fact. The author is not always consistent in his transliteration; he writes both Witte and Wittë, Mikhail and Mikhael, Sherbatov and Tscherbатов; he renders the ninth letter in the Russian alphabet sometimes as "ë," e.g., Mëlyukov, sometimes in the more usual fashion as "i," e.g., Pushkin and *mujik*; he even uses both forms for the same letter in the same word, e.g., *chinovnëkë* (I, 408) and *isprav-nëkë* (I, 109). He is wise, however, in using freely Russian words to denote things peculiar to Russia, instead of trying to make up English terms which would inevitably be awkward and misleading.

Professor Mavor's two volumes are a valuable and much-needed work, and, in spite of any minor shortcomings, are likely to remain for some time the standard English authority on the general economic history of Russia.

SIDNEY B. FAY.

Smith College.

La Révolution Industrielle et les Origines de la Protection Légale du Travail en Suisse. By WILLIAM E. RAPPARD. (Berne: Stämpfli et Cie. 1914. Pp. vii, 343. 8.75 fr.)

This book is one of a series on Swiss economic history, and was written at the request of the Swiss labor commission on industrial hygiene and the prevention of labor accidents as a part of their exhibit for the Swiss National Exhibition of 1914. It is a well-proportioned, scientific, and thorough examination of the Industrial Revolution in Switzerland, so well-done, so carefully and fully reinforced and substantiated by contemporary documentation, that one is almost tempted to pronounce it, in respect to the particular phases of the Industrial Revolution with which it is concerned, as definitive for Switzerland.

The first third of Dr. Rappard's work is an analysis of industrial Switzerland before 1798. In this he broadmindedly and lucidly characterizes the political and religious factors which influenced and modified the general character of the economic life of the people. He thereupon proceeds, industry by industry, to explain the actual status and working methods of Switzerland's economic or-

ganization. The cotton industry unquestionably stood first in importance at that time. We meet with its first traces at Bâle in 1380, but soon afterwards the canton of Zurich forged to the foremost place and stayed there during the seventeenth and eighteenth centuries. The city of Zurich kept close control of the industry in the canton by a series of laws, among them one which ordained that cotton cloth could be sold only to its citizens—a circumstance which produced great dissatisfaction and which proved later to be the most influential factor in destroying the ancient régime in eastern Switzerland. Cotton manufacturing was carried on, for the most part, by the domestic system. Traveling agents, called *Träger*, scoured the countryside in procuring orders and dispensing new raw material. The machinery in use was of the simplest, easily installed and repaired by ambulatory mechanics known as *Geschirrfasser*. The silk industry, also largely centered at Zurich, progressed more rapidly in the early eighteenth century than any other. In it, at one place at least, a very unique form of power machinery was in vogue. This power was provided by a large number of female idiots, deaf-mutes and blind people who walked round and round turning a horizontal shaft attached to a wheel. Shortly after 1730, however, hydraulic water power was substituted for this monotonous and ill-paid labor. Bâle, owing to a large influx of Huguenots in the sixteenth century, became the center of the ribbon trade. Here, as in the canton of Zurich, all buying and selling was concentrated in the capital, although the work was done in the scattered villages of the neighborhood. Modern watchmaking, in the meanwhile, had its origin in Geneva in 1587, and so rapid was its progress that by the time of the French Revolution there were in Geneva over a thousand master watchmakers with many thousand skilled workmen in their employ. Here, as in Neuchatel, its other center, the industry was carried on largely in the homes of the workers, in the country and even in the mountains, for no manufacturing in the early days was so split up as that of watchmaking.

The methods of Swiss industry were revolutionized during the first half of the nineteenth century. And although in the manufacture of cotton Switzerland was not able to keep pace with England, nor in that of silk with the French—it was not till ten years after the Jacquard loom had been adopted in Lyons that it made its appearance in Zurich—in one industry Switzerland stood su-

preme by the middle of the century, namely, watchmaking. A mechanic from Neuchatel, Jean Jacques Jeanneret-Gris, about 1765, conceived the possibility of watchmaking by machinery, and from his time down to the series of ingenious invention of Georges Leschot in 1839, the Swiss watch industry made great strides. Yet, curiously enough, in this particular industry it was not until the beginning of the twentieth century that the domestic system began to be displaced to any considerable extent by that of the factory, and by the middle of the nineteenth, the approximate date for the ending of this book, that process had scarcely begun. The reason for this, Dr. Rappard considers, was partly due to the fact that watchmaking was carried on almost entirely by men of the Latin stock who were more disinclined to factory discipline than their Teutonic brethren, partly because, as Marx points out, those manufactured products which are the result of a succession of continued processes are more readily adapted to the factory system than those which result from a number of separate processes, each complete in itself.

The third section of the book is given over to the beginnings of labor legislation. The apparently democratic form of government in Switzerland before the Industrial Revolution is no criterion for assuming, says Rappard, that the country was then without vexatious labor disturbances. At the upper end of the scale there was friction between the old established watchmakers and the newcomers; at the lower end the calico printers were restless and resentful at the evil conditions under which they lived. Here and there certain partial protection was afforded to the workers—witness the Zurich law of 1779 forbidding the employment of children who could not read—but in general there was scarcely any protective legislation before the nineteenth century. The Swiss revolution in 1798 was largely negative, in so far as labor legislation was concerned. The honor of first definitely accomplishing anything in this direction was due to the canton of Zurich which, in 1815, passed the first Swiss law of modern lines. But so slow was the awakening of the Swiss conscience in this matter that only two other cantons had followed the example of Zurich by the middle of the century.

The great bulk of the Swiss working class, during the period of the Industrial Revolution, were in a worse condition in respect to wages and hours of labor than their fellow workingmen in England

and France. On the other hand, they were favored by the old Swiss land laws which prevented the growth of large landed estates, and also by the important fact that the Swiss manufacturing cities averaged much less in population than those in the larger countries. In consequence, the health of the Swiss workers was less endangered by overcrowding, bad sanitation, etc. At any rate, whether from this or other causes, the native Swiss took but little interest in the socialism of the mid-nineteenth century, holding aloof from the propaganda of the International, which was carried on so extensively by foreigners from within the borders of Switzerland.

When the movement for the regulation of labor conditions did gather headway, it was the German not the French and Italian cantons which inaugurated it, and, unlike similar legislation in the great countries of Europe, the impetus was due primarily to the activity of the working class itself, rather than to philanthropic or sedative motives on the part of the employer.

WALTER P. HALL.

Princeton University.

Intervention and Colonization in Africa. World Diplomacy, Vol.

1. By NORMAN DWIGHT HARRIS. With an introduction by JAMES T. SHOTWELL. (Boston: Houghton Mifflin. 1914. Pp. xviii, 384. \$2.00.)

By the promise of the title-page this is the first volume of a series on "World Diplomacy." The author's preface declares the expectation of a second volume, on European Intervention and Competition in Asia.

Two of the six colored maps in this book bring to the eyes in a moment the whole story of these 384 printed pages. One shows the European possessions in Africa in 1870, a few faint films of color along disconnected fringes of continent, indicating little more than a foothold for France, England, Portugal, and Spain. The other depicts the Africa of 1914, parcelled out from circumference to center among the same powers, with Germany and Italy added. In less than forty-five years this partition of Africa into pastures for European commerce has been achieved, partly by chartered companies, but, in later stages, for the most part by diplomacy.

Among the all too brief generalizations in the opening chapter we learn that the directing motive in the partition of Africa, which

was originally a desire for territorial aggrandizement, has become in these latter years chiefly economic and commercial. This purpose has, however, not taken the shape in Africa of a ruthless exploitation of natives, as it did in the Americas. The European nations have perceived the unwisdom of investing their rapidly increasing wealth in Africa without a scientific study of the African peoples, customs and institutions; and the new masters of Africa have tried to preserve and develop the native social and political organizations, and to conserve the natural resources. No power has done this more scientifically and persistently than France, which controls an African territory as large as that of the United States including Alaska.

Four chapters are filled with the story of the growth and consolidation of French Africa. With a backward glance at the southern limits of old Rome, the author groups England in Egypt and the Sudan, Italy in Tripolitania, and France in the other Barbary States, under the title, "The Re-occupation of Northern Africa." Roughly speaking, this accounts for half the book. Of the other half, in two chapters we find the story of the Congo Free State and its transition to a Belgian colony very well told. One chapter is devoted to the beginning of a German colonial policy in Southwest Africa; another, to the combined careers of British and German Southeast Africa and Uganda; and the two remaining chapters, to English colonization in South Africa and along the Niger River. The story of the latter colony is given at length, as the best example of modern English ideas of colonial administration in the tropics.

In each chapter a few paragraphs are devoted to the systems of taxation and revenue in each colony (the statistics of 1911-12) and justice is done to the services rendered by various chartered companies in the early phases of colonial consolidation.

There are good maps and bibliographies. The appendixes also contain territorial statistics and a comparison of revenue and output, imports and exports, in 1887 and 1912.

CHARLES H. LEVERMORE.

NEW BOOKS

BARTHOLOMEW, J. G. *A school economic atlas*. Third edition. (London: Oxford University Press. 1914. Pp. xi, 64. 2s. 6d.)

The present edition of this atlas does not differ essentially from the first edition which appeared some four or five years ago. The principal changes are to be found in the charts and diagrams, which

have been brought down to a later date, and in minor revisions of political maps, made necessary by the recent shifting of political boundaries, as, for example, in Northern Africa.

The first 17 pages contain general maps of the world illustrating such features as natural distribution of vegetation, ocean currents, rainfall, density of population, distribution of races, of religions, etc. In fact, all of the factors which are believed to influence economic development are here shown in their general aspects. Emphasis is laid upon climatic phenomena, inasmuch as climate serves to illustrate exceptionally well the usual processes of geographic control in economic life. From pages 18 to 50 there are special maps of each of the continents or parts thereof. These are to be studied not as separate units, but collectively. Apparently the fundamental idea is to show the influence upon industrial and general economic development of rainfall, temperature, density of population, etc. The maps on the last 14 pages of the book serve to illustrate clearly the regional distribution of the world's principal commercial products.

The maps are well made and, though many of them are small, the coloring brings out strongly the points which it is intended should be illustrated. There is a well-written introduction by Professor Lionel W. Lyde which serves to emphasize the general significance of each successive map, and to make clear many special features which otherwise might be overlooked. On the whole, this is a high-class atlas of its kind. It is better adapted to secondary school work in geography than to work of a higher grade, although there are several maps and diagrams which should be found useful in advanced courses in economic geography.

AVARD L. BISHOP.

BLAICH, L. R. *Three industrial nations; an industrial geography of England, Germany, and the United States.* (New York: American Book Co. 1915. Pp. 12, 366, maps. 64c.)

BROOKS, R. P. *The agrarian revolution in Georgia 1865-1912.* Bulletin of the University of Wisconsin, no. 639. History series, vol. 3, no. 3. (Madison: University of Wisconsin. 1914. Pp. 129. 40c.)

CALWER, R. *Das Wirtschaftsjahr 1912.* (Jena: Fischer. 1915. 16 M.)

CROLL, W. *Die Entwicklung der Anschauungen über soziale Reform in der deutschen Sozialdemokratie (nach den sozialdemokratischen Parteitagisprotokollen von 1890-1912).* (Berlin: Ebering. 1915. Pp. 86. 1.80 M.)

DEWITT, B. P. *The progressive movement.* (New York: The Macmillan Company. 1915. Pp. xii, 376.)

What is called the progressive movement in the United States is reviewed. The first phase of the movement has been the attempt, through direct primaries, etc., to make government more sensitive to general rather than special interests. This phase is reviewed impar-

tially for the democratic, republican, progressive, socialist, and prohibition parties. The second phase has been an extension of governmental power over corporate and business enterprise, the use of national resources; and the third, the protection and relief of the less fortunate. The progressive movement in the states and state governments and municipalities is also dealt with here. The book, though without scholarly intentions, may be read profitably by those whose specialty is not politics and its phases, as well as by the large class of general readers.

F. A. DEWEY.

DUNBAR, S. *A history of travel in America*. (Indianapolis: Bobbs-Merrill. 1915.)

FLIPPIN, P. S. *The financial administration of the colony of Virginia*. (Baltimore: Johns Hopkins Press. 1915. Pp. 95. 50c.)

LAURÉ, M. J. *The property concepts of the early Hebrews*. (Iowa City: University of Iowa. 1915. Pp. 98.)

LIPPINCOTT, I. *A history of manufactures in the Ohio Valley to the year 1860*. (Chicago: Published by the author. 1914. Pp. 214.)

In this study Dr. Lippincott has traced the development of manufactures in the states of Ohio, Indiana, Illinois, Kentucky, and Missouri, from their settlement to 1860. After an introductory chapter describing the natural resources of the Ohio Valley, he divides the history into three periods. During the first of these, the period of exploration, which is made to extend to 1790, there was practically no manufacturing except of a few simple household articles, such as flour and meal, meat, salt, and similar commodities, on the part of the early French and other settlers.

It is in the second and third chapters that the author makes his contribution to the economic history of the United States. The pioneer period was characterized by "the home manufacture of almost all food and clothing, and by the home consumption of the greater part of the product." But the main work of the pioneers was to drive back the Indians, clear the land, build homes, and prepare the way for the later development of industries. As this period is made to extend to 1830, it is clear that the Ohio Valley was as yet practically isolated from the industrially more developed East, and that the people in that section were forced to depend upon their own efforts in considerable measure to satisfy their more urgent needs. The manufactures of this period are therefore still of the household type and generally for home or local consumption, though some of them found a market down the Mississippi River.

The author gives the name "mill period" to the period from 1830 to 1860 because it was characterized by "the great relative importance of the products of flour, grist, and saw-mills." These mills were widely scattered, employed little capital, and each one was usually owned by one person, differing in all these respects from the developed factory system. For this period the growth of manufac-

tures is traced more carefully and in greater detail, which is made possible by the growing wealth of data. The economic background of markets and means of transportation is also adequately presented.

ERNEST L. BOGART.

LOGAN, E. *A history of Indiana from its exploration to 1850.* (Indianapolis: W. K. Stewart Co. 1915. Pp. 515, illus. \$3.)

ROHRBACH, P. *Germany's isolation; an exposition of the economic causes of the war.* Translated from the German by PAUL H. PHILLIPSON. (New York: McClurg. 1915. Pp. 186. \$1.)

RUSSELL, E. B. *The review of American colonial legislation by the king in council.* Columbia University studies in history, economics and public law, LXIV, 2. (New York: Longmans. 1915. Pp. 227. \$1.75.)

Chapter 4 deals particularly with trade, shipping, and finance.

SCHMIDT, P. H. *Weltwirtschaft und Kriegswirtschaft.* (Zurich: Füssli. 1915. Pp. 23.)

SLATER, G. and SHOTWELL, J. T. *The making of modern England.* New revised edition. (Boston: Houghton Mifflin. 1915. Pp. xlii, 308. \$2.)

SWAIN, G. F. *Conservation of water by storage.* Addresses delivered in the Chester S. Lyman Lecture Series, 1914, before the senior class of the Sheffield Scientific School, Yale University. (New Haven: Yale University Press. 1915. Pp. xvii, 384. \$3.)

The author first calls attention to the fact that conservation, as applied to natural resources, does not properly mean withdrawal from use, but merely a wise use with the avoidance of waste. He discusses briefly the development of the material resources of the United States, pointing out the danger which has accompanied it. Natural resources which have been so recklessly wasted and which should be conserved are classified under four heads: forests, waters, lands, and minerals. The conservation of water involves not only a question of the generation of power from a force that would otherwise be wasted but the saving of a corresponding amount of one of the non-renewable or slowly renewable resources. The proper conservation of flowing water also involves the idea of irrigation, water supply, and navigation. The author discusses riparian rights, compares the powers of federal and state governments over navigable streams, and makes a comparison of the two radically differing opinions in regard to the authority of private parties.

After quoting the provisions of the General Dam Acts of 1899, 1906, and 1910, the author concludes that there is no doubt that the present condition of things calls for a remedy by new legislation which shall give definite assurance to investors and which shall remove each case of water power development from the necessity of the enactment of a separate bill by Congress. He believes that from the point of view of efficiency, a considerable degree of monop-

listic control is desirable, and that under the public regulation now generally in effect it does not seem to present any real danger.

In chapter 5 the author urges very strongly a greater use of the water power on the public domain; also that the two elements to be borne in mind in considering conservation of water power are (1) to encourage the greatest possible development and (2) to ensure this development in a manner consistent with the public interest. Of the three kinds of franchises—perpetual, fixed, and indeterminate—he recommends the indeterminate. A clear and interesting chapter on the technical aspects of conservation by storage is illustrated with excellent photographs and diagrams. One of the most suggestive parts of the book is the chapter on forest and stream flow. The last chapter gives interesting material concerning the causes and control of the great floods of recent years. An appendix includes documentary material such as presidential messages, reports of committees, laws, etc.

Although the lectures were given primarily for engineering students, there are many helpful suggestions for the student of commercial and industrial subjects.

C. W. WASSAM.

THOMPSON, C. M. *The Illinois whigs before 1846*. (Urbana: University of Illinois. 1915. Pp. 165. 95c.)

VEBLEN, T. *Imperial Germany and the Industrial Revolution*. (New York: Macmillan. 1915. Pp. viii, 324. \$1.50.)

WESTERFIELD, R. B. *Middlemen in English business; particularly between 1660 and 1760*. (New Haven: Yale University Press. 1915. Pp. 334. \$3.40.)

YOUNG, J. T. *The new American government and its work*. (New York: Macmillan. 1915. Pp. xi, 663. \$2.25.)

Economic and social aspects of war; a selected list of references. (New York: The Public Library. 1914. Pp. 15.)

Industries in British East Africa. (London: "South Africa." 1915. 6d.)

The year book of social progress, 1914-1915. (London: Nelson. 1915. 5s.)

Die deutsche Volkswirtschaft im Kriege. (Berlin: Disconto-Gesellschaft. 1915. Pp. 109.)

Volkswirtschaftliche Chronik für das Jahr 1914. Reprinted from "Jahrbucher für Nationalökonomie und Statistik." (Halle a. S. 1915. 15 M.)

Agriculture, Mining, Forestry, and Fisheries

The Anthracite Coal Combination in the United States. With Some Account of the Early Development of the Anthracite Industry. By ELIOT JONES. Harvard Economic Studies,

Vol. XI. (Cambridge: Harvard University Press. 1914. Pp. xiii, 261. \$1.50.)

While this monograph deals specifically with the combination movement among anthracite producers, the author has been led by the peculiarities of the combination to deal with many aspects of the industry. Two historical chapters make clear that the foundation for the present situation was laid at the very beginning of the industry when mining and transportation powers were joined in the same companies. It was not, however, till after the Civil War that this union of powers became a dominating feature of the industry. The rapid acquisition of coal lands by the carriers during the early seventies constituted a revolution in the industry. The movement allayed competition of one kind but forced a more bitter competition of another. The railroads in large measure secured the source of their traffic against invasion; but in doing so they incurred a vast burden of investment which forced a fierce competition among producers, leading to an era of combination. The author divides this era into two periods: the first, one of intermittent success and failure, from 1873 to 1898; the second, since 1898, which he calls the period of "effective combination."

It is with this later period that the author is chiefly concerned. With marked skill and judgment he has wrought out of the great mass of material which has accumulated during recent years in the course of numerous suits and investigations, a lucid and informing account of the way effective control has been secured and how it has been used. Railroads have been consolidated; the independent operators have been practically eliminated by purchase and by the so-called percentage contracts; and there has been established a well-defined community of interest. This community of interest appears to be the unique factor. Railroad consolidation had gone far before 1898 and the sale of coal to the carriers at the mines for a percentage of the tide-water price had long been an important feature of the trade. Interlocking directorates are a new feature in this period and are a sufficient explanation of harmonious action. No gentlemen's agreement even is needed under such conditions, and no "documentary evidence of solidarity" such as the courts require as proof of combination is likely to be uncovered.

Nevertheless, Dr. Jones well shows in the three excellent chapters on the production, the transportation, and the price and sale

of coal, occupying more than a third of the text, that all the advantages to be expected from monopoly have followed the obvious signs of centralized control. The percentages mined and carried by the different interests have remained constant, freights have been abnormally high, prices have been stable and have risen, the rise being "only partially explained by the increased cost of mining," while the earnings of the railroads, if not of the coal companies, have been exceptionally large. The conclusion of the author that "these railroads are clearly working in harmony with each other" seems fully warranted by the facts presented.

The closing chapter, on the Legal Status of the Combination, skilfully traces the various efforts, beginning with the Hearst suit in 1902, made to break up the monopoly. There is an excellent account of the enactment of the Commodities Clause of 1906 and of the suits, thus far barren of results, which have arisen under it. The story of the almost equally barren litigation under the anti-trust law closes the chapter and the volume.

One naturally asks what is to be expected from the critical study of the development of such an industry. It is a favorite view of the representatives of the historical school that "we have long enough pursued abstract lines of reasoning, and then looked round for practical 'examples'; and that we might now, occasionally, begin with a concrete group of circumstances—a great industry, or a staple trade—and watch the generalizations (the 'principles' if you please) emerging from the mass of particulars."¹ Dr. Jones gives no intimation of adhering to that school, though for the time following its method; and, of course, his book can not be judged by its standards. Certainly, the study leads to no rule of practical wisdom which tells him what to do next. He is content with describing the process by which the present conditions in the industry have been reached and in pointing out where legislation has failed of its purpose. Little space is given to criticism or generalization. It seems safe to infer from the narrative, however, that the author regards the combination as an industrial evil, but that he has little expectation of its being remedied in the near future. The tardy reduction of freight rates will prove of "less importance than might at first appear" (p. 144), since but little independent coal is now left to be shipped at the reduced rates. In case the efforts to divorce the mining from the transportation in-

¹ Ashley, *British Industries*, p. vii.

dustry succeed, low freight rates will, of course, be of great importance. There is no present prospect of such an outcome, however, and Dr. Jones doubts whether such divorce would prove a public advantage (p. 219). Question is also raised whether it is worth while to attempt the dissolution of the combination, since the highly centralized control of the mines make easy the "formation of an *entente cordiale* among the companies which would effectively maintain prices and yet be less open to attack." How deeply the author distrusts remedial legislation of the customary sort, is shown by his suggestion that the solution of the combination problem is bound up with the larger problem of public ownership of the material resources of the country or the alternative of private ownership and public regulation.

From the point of view of a lucid and instructive narrative of the development of a great industry and of the problems connected with it, and this is all that is attempted, the monograph leaves little to be desired. It has a good index, a selected bibliography, and several useful appendixes. In style and in subject-matter it fully maintains the high standard of the series to which it belongs.

G. O. VIRTUE.

University of Nebraska.

NEW BOOKS

- BULLOCK, W. *Timber from the forest to its use in commerce.* (London: Pitman. 1915. Pp. 160. 1s. 6d.)
- DRYSDALE, A. L. *Greater profits from land: the secret of successful farming.* (Edinburgh: Edina Pub. Co. 1914. Pp. viii, 187. 10s.)
- GUHA, A. C. *Brief sketch of the land systems of Bengal and Behar.* (London: Thacker. 1915. 10s. 6d.)
- JAMES, A. F. B. *Nitrate facts and figures, 1915.* Twelfth year issue. (London: F. C. Mathieson & Sons. 1915. 2s. 6d.)
- JOHNSTON, J. H. C. *A national agricultural policy. The finance of occupying ownership and coöperative credit.* (London: King. 1915. Pp. 40. 6d.)
- MARSHALL, F. R. and HELLER, L. I. *The woolgrower and the wool trade.* (Washington: U. S. Dept. of Agriculture. 1915. Pp. 32. 15c.)
- NIXON, R. L. *Cotton warehouses. Storage facilities now available in the South.* (Washington: Dept. of Agriculture. 1915. Pp. 26. 5c.)
- PHILLIPS, G. C. *The land after the war and British wheat production.* (London: St. Catherine Press. 1915. Pp. 73. 1s.)

SINCLAIR, W. *Re-settlement and cultivation of land in British Columbia.* (Vancouver: J. Pollock. 1915. Pp. 13.)

TODD, J. A. *The world's cotton crops.* (London: Black. 1915. Illus. 10s.)

WELD, L. D. H. *Studies in the marketing of farm products.* (Minneapolis: Univ. Minnesota. 1915. Pp. iv, 113, illus. 50c.)

Economic minerals and mining industries of Canada. Panama Pacific edition. (Ottawa: Dept. of Mines. 1915. Pp. 78, illus.)

Feed and hay crops for Florida live stock; a supplement to "Live stock farming in Florida." (Saint Augustine: Land & Industrial Dept. of Florida East Coast R. R. 1915. Pp. 40.)

Field agent's handbook of agricultural statistics. (Washington: Dept. of Agriculture. 1914. Pp. 116.)

The production and consumption of dairy products. (Washington: Dept. of Agriculture. 1915. Pp. 19. 5c.)

Zehn Jahre Deutsche Landwirtschaftliche Genossenschaftsschule. (Berlin: Reichsverband der deutschen landwirtschaftlichen Genossenschaft. 1914. Pp. 68.)

Manufacturing Industries

NEW BOOKS

BACKERT, A. O. *The A B C of iron and steel, with a directory of the iron and steel works and their products of the United States and Canada.* (Cleveland, O.: Penton Pub. Co. 1915. Pp. xv, 338, illus. \$5.)

BASSETT, S. W. *The story of leather.* (Philadelphia: Penn. Pub. Co. 1915. Pp. 240, illus. 75c.)

America's leading manufactures. Third edition. (New York: Commercial Newspaper Co. 1915. Pp. 295-558, illus.)

Published in many languages and designed for the use of American consuls and foreign buyers.

Annual statistical report of the American Iron and Steel Institute for 1913. (New York: American Iron & Steel Inst. 1915.)

Second annual industrial directory of New York. (Albany: Dept. of Labor. 1915. Pp. vi, 787.)

Transportation and Communication

Railway Rates and Traffic. Translated from the third (1907) edition of C. COLSON's *Transports et Tarifs* by L. R. CHRISTIE, G. LEEDAM, and C. TRAVIS. Edited and arranged by CHARLES TRAVIS. (London: G. Bell and Sons, Ltd. 1914. Pp. viii, 195. 3s. 6d.)

We have in this book, which is a partial translation of M. Colson's work, a clear presentation of the theory of rate making, followed by a discussion of rate-making practice in various countries, and, finally, a general survey and discussion of some practical problems including, for example, public management versus public control.

The maximum rate which can be charged for any transportation is fixed by the value of the service. This, in turn, will depend on the difference in the price, at the point of origin and the point of destination, of the goods carried. Such a difference in the price of a good between two places is likely to be greater as the distance is greater or as the value of the goods carried is greater. The author recognizes, however, that the difference in the price of a good in two places, while often limiting the charge for transport, may also be largely determined by this charge. On the other hand, the additional net cost of transportation fixes a minimum rate. In the long run, however, rates must be high enough to pay fair returns on investment, or railroads will not be built.

The general theory of rate making having been set forth, the author discusses the effect of the rates charged on the welfare of the public and of the companies. Up to a certain point, if the toll (by which, apparently, is meant the excess charge for carrying any goods, above the special additional cost involved) were uniform, reduction of the toll would be to the advantage alike of companies and public. Beyond that point, reduction would be of advantage to the public but not to the companies. Assuming a uniform toll, complete utilization of facilities could be obtained only by making the toll zero. Rates high on traffic which can bear high rates, are said merely to affect the distribution of benefit between the public and the transportation agency, without affecting the total utility of the railroad; but tolls (*i.e.*, rates in excess of additional net cost) which make transportation of any commodities impossible, involve a clear loss to all.

Attention is next turned to various rate scales or systems, which are represented graphically. For example, there is the system of fixed terminal charge and a transportation charge varying in exact proportion to distance. Since, however, for long distances, rates so constructed are likely to be so high as to discourage traffic, the arrangement is frequently adopted of making the base (by which the mileage is multiplied) decrease as the distance increases. This arrangement has to be

modified, usually by a flat rate between certain distances, to prevent its resulting in a lower charge for a longer distance, where the lower base goes into effect, than for a somewhat shorter distance. A third system reduces the base only for that part of the transportation in excess of a fixed distance. Thus, the transport rate might be 8 centimes per kilometer for the first 25 kilometers, 4 centimes each for the next 75, etc. Besides these rate scales the author discusses also special rates.

Succeeding sections of the book deal with Railway Rates in France, European and American Practice, General Survey and Conclusions. Throughout, the explanations of principles and practice are clear, and the translation should prove of value.

HARRY GUNNISON BROWN.

Yale University.

The Panama Canal and International Trade Competition. By LINCOLN HUTCHINSON. (New York: The Macmillan Company. 1915. Pp. x, 283. \$1.75.)

The Panama Canal. By REUBEN E. BAKENHUS, HARRY S. KNAPP and EMORY R. JOHNSON. (New York: John Wiley and Sons. 1915. Pp. xi, 257.)

The first of these works attempts to estimate the influence of the Panama Canal on international competition for the trade of the Pacific. It is primarily a study in commercial geography, an industrial and commercial survey of the entire Pacific region, with some effort, of course, to forecast the way in which trade relations with the United States and Europe will be affected by the change in water routes. Much of the text is taken up by a detailed analysis of trade statistics for the past fifteen years. These figures show that staple products of American industry have found increasing sale in Central America, Mexico, Japan, and the Philippines, and that the chief gains have been made in iron and steel products, mineral oils, raw cotton, and lumber. This part will be found extremely tedious, not to say trying, to the average reader. The pages bristle with statistical tables and quantitative comparisons the significance of which is lost in the sheer multiplicity of detail. Moreover, the reader's patience is rewarded by the statement that these figures merely indicate the "lines of least resistance for the exporter" and show "where it will be wisest to make the first attack" (p. 250). The author conveys the impression that the

canal will merely accentuate certain lines of commercial development in which America has already a clear advantage.

The second work, as the title indicates, is a compilation of articles by three writers, civil engineer, naval officer, and expert on transportation respectively. It deals with the canal as an engineering feat, as a military and naval asset, and as an aid to transportation and commerce. A study of the work leaves the impression that the importance of the canal has been greatly overestimated. The sections on history and construction, indeed, serve only to enhance our respect for the genius and organizing ability displayed in solving problems that had baffled skill and depleted financial resources for half a century. This part of the work is written in the clear attractive style of Mr. Bakenhus. It would be hard to imagine a treatment which gives a clearer impression of the canal from the standpoint of engineering problems involved and yet so free from technicalities as to make it easily understood by the average reader.

In dealing with the canal as a military and naval asset, Captain Knapp contends that the enterprise has been overrated. In some ways, moreover, it may increase the demands on our military and naval equipment. The responsibility for its defense and neutralization (which must be assumed by the United States alone) coupled with a specific pledge for maintaining the independence of Panama, makes our existing armament all the more inadequate. This section of the book will be found least satisfactory to the reader. The style is not especially clear, there is much needless repetition, and the author's bias in favor of a larger navy is prominent at every point.

When we turn to the canal as an economic resource our hopes of greatly reduced rates between Atlantic and Pacific ports are also discounted by the expert conclusions of Professor Johnson. Considerable saving in time and cost of transportation may be expected, but rates will not necessarily fall in the same proportion. Steamship rates will be adjusted in "conferences" and with reference to charges on transcontinental railway lines. The author predicts (p. 228) that "it will be necessary to regulate the service and charges of the coastwise steamship companies" as we now regulate the railways. The outlook for the financial success of the canal is not especially promising. Even assuming a normal development in traffic, we cannot expect a revenue sufficient for main-

tenance, operating expenses, and interest on bonds, before 1925. Tolls on coastwise traffic will be necessary to meet expenses. This last section is written in Johnson's clear and compact style; expert conclusions are expressed in precise quantitative form, but the reader is not burdened with numerous textual references to statistical data.

JAMES H. GILBERT.

University of Oregon.

NEW BOOKS

- BEALE, J. H. *Railroad rate regulation, with special reference to the powers of the Interstate Commerce Commission under the acts to regulate commerce.* Second edition rewritten by BRUCE WYMAN. (New York: Baker, Voorhis. 1915. Pp. xcvi, 1210. \$7.50.)
- COLSON, C. *Transports et tarifs. Supplément annuel (1915) à la 3^e édition, statistiques mises à jour et rapprochées des statistiques étrangères.* (Paris: Rivière. 1915. 1 fr.)
- COLTON, A. *Conference rulings of the Interstate Commerce Commission.* (Chicago: LaSalle Extension Univ. 1915. Pp. 45.)
- FULLER, H. B. *The act to regulate commerce, construed by the Supreme Court.* (Washington: J. Byrne & Co. 1915. Pp. x, 585. \$6.)
- GARTNER, K. K. *Notes to Interstate Commerce Commission reports.* Two volumes and quarterly cumulative supplements. (Washington: John Byrne & Co. 1915.)
- KIRKALDY, A. W. and EVANS, A. D. *The history of economics of transport.* (London: Pitman. 1915. Pp. 348. 7s. 6d.)
- LEE, I. L. *Human nature and railroads.* (Philadelphia: E. S. Nash & Co. 1915. Pp. 129. \$1.)
- LUST, H. C. *Quarterly digest of decisions under the interstate commerce act.* No. 4 (no. 1 for 1915). (Chicago: Traffic Law Bk. Co. 1915. Pp. 157. \$2.)
- THOMPSON, S. *Railway statistics of the United States for the year ending June 30, 1914.* (Chicago: Slason Thompson. 1915. Pp. 140.)
- WATARAI, T. *Nationalization of railways in Japan.* Columbia University studies in history, economics and public law, LXIII, 2. (New York: Longmans. 1915. Pp. 156. \$1.25.)
- A. C. A. 101. *One hundred and one questions and answers about traffic work.* (Chicago: Am. Commerce Assoc. 1915. Pp. 65.)
- Proceedings of the fourth American road congress, under auspices of American Highway Association, American Automobile Association,*

Atlanta, Ga., November 9-14, 1914. (Baltimore: Waverly Press, 1915. Pp. 361.)

Report on the use of water terminals and railroad connections, made by the directors of the port of Boston. H. Doc. No. 2091. (Boston. 1915. Pp. 27.)

Accounting, Business Methods, Investments, and the Exchanges

Accounts. Their Construction and Interpretation for Business Men and Students of Affairs. By WILLIAM MORSE COLE. Revised and enlarged edition. (Boston: Houghton Mifflin Company. 1915. Pp. x, 445. \$2.25.)

Professor Cole is an unquestioned authority on accounts, and the recent edition of his book furnishes additional evidence of his mastery of a science that is more difficult than any other to reduce to writing. The preface states, "accounting is nothing but sublimated common sense applied to finding and telling the truth about business." As the tendency of college men is more and more towards business, it is obvious that more and more they should be prepared for business. And it is too bad that a knowledge of accounts which will tell them "the truth about business" is made so difficult to acquire. Professor Cole's book is extremely well written, yet it leaves one with a feeling that somehow or other it should have been easier to follow and understand. Obviously he is not called upon to write for college students and business and professional men in words of one syllable, and it may be that no one else will do so well, but the fact remains that while accounting should be a required subject in every course leading to a business career it must be presented somewhat differently before it will receive the attention it deserves.

An important improvement in this new edition is the insertion of a series of transactions, arranged as found in books of account, enabling the reader to visualize the principles explained on preceding pages.

One of the greatest problems in accountancy is the proper treatment of depreciation. Professor Cole has rewritten his comments on this subject, and is not quite so caustic in his criticisms of those who carry their property at cost on the asset side of the balance sheet and a reserve for depreciation of the same property on the liability side. Without doubt, if one wishes to subtract one amount from another, it is better to place one above the other and do it

simply and directly, but many accountants contend that so long as an allowance for depreciation is at best a rough estimate, good practice will permit the asset account to appear at cost as an asset and the allowance for depreciation to appear among the liabilities. The latter treatment saves an apparent appraisal of property accounts which is sometimes inferred where depreciation reserves or allowances are deducted therefrom on the asset side of the balance sheet. Even if the reserve for depreciation is created from earnings as a cost of operation, as distinguished from a safety reserve created out of surplus profits, it is almost sure to be excessive or insufficient and there is much to be said in favor of including it among the liabilities.

Professor Cole's suggestion that the word "allowance" should be used where the item is a deduction from an asset and "reserve" only where it is created out of net profits, is worthy of consideration, but it is doubtful if the majority of accountants will approve. He cites twenty cases, in which ten used "reserve for depreciation" to mean simple overstatement of assets and ten used the same caption to mean true profits reserved for safety. The corporations selected certainly do not represent twenty average concerns, because in at least eight out of ten cases the term "reserve for depreciation" represents a deduction from earnings before a true net profit is determined. In many financial statements an allowance for depreciation is not made until all other items are provided for and frequently the term "net profit" is used before the allowance for depreciation is made. This, however, is due chiefly to ignorance and does not alter the fact. Reserves or allowances for bad debts and similar items should always be deducted from the asset to which they relate.

It is significant that after seven years Professor Cole finds no reason to modify two statements which appeared in the first edition, *viz.*, that "loss on worthless notes cannot be shifted to some one else by the mere fact of discount" and "a contract signed in December for raw material to be delivered and paid for in February constitutes one of the liabilities of the business on January 1st." If every college student could be made to memorize these two simple statements of fact, they would prove of inestimable value in business life.

It is not too much to say that most bankers and business men fool themselves with respect to financial statements and while pub-

lic accountants endeavor to set them right, it is slow work. In a recent failure it was disclosed that while the balance sheet of the bankrupt showed \$9,000,000 of liabilities there were outstanding liabilities of \$31,000,000 additional, consisting of so-called notes receivable discounted. The "notes receivable" were mostly worthless, so that the endorsement thereon converted them into direct liabilities. The practice had been going on for years, and is still prevalent to a large degree.

The suggestion that contracts for future contracts should be reflected in a balance sheet is more radical. It accords with the theories of professional auditors, but is seldom seen in practice. Where the commitment is not unfavorable and is merely an incident of a going business, there is little to be said in favor of mentioning it on the face of a balance sheet; where the commitment will probably result unfavorably, it certainly must be mentioned or a balance sheet will not set forth the true financial position of a concern at a given date. For this advanced stand Professor Cole deserves great credit.

R. H. MONTGOMERY.

Railroad Accounting. By WILLIAM E. HOOPER. (New York: D. Appleton and Company. 1915. Pp. xi, 461. \$2.00.)

Mr. Hooper's book is undoubtedly designed for the use of practical railroad accountants as well as for investors and students of railroad operations. It covers both theoretical accounting problems and practical bookkeeping methods. The subject is one that is difficult to handle in all its aspects. Mr. Hooper states that his prime purpose is to show the "why" of the accounts, and not to discuss the question whether the Interstate Commerce accounting rules are the best that can be devised. One can not read very far into his pages, however, without discovering that he is not in accord with the strict classification of "additions and betterments." Thus, on page 38, he says:

The commission, by defining expenses so as to exclude betterments is putting the roads in danger of adopting such a short sighted policy that they will not in fair times accumulate a surplus, not necessarily a fund, but a condition of property comparable to the new suit on which they can live in times of depression.

Moreover, the contention of the railroads that betterment expenditures representing the "cost of progress" should be paid out of current earnings, rather than the issue of new securities is

upheld as "sound business practice" (p. 44). Cost of progress, however, is "an additional investment in property and not an expense incident to maintenance" (p. 49).

In the discussion of depreciation, Mr. Hooper offers further criticism of the commission's accounting regulations. It is pointed out that inasmuch as the rules permit the railroad companies to determine the rate of depreciation with respect to rolling equipment this charge has more often been determined by the financial situation of each individual road rather than at the rate at which the equipment wears out. "A charge for depreciation is in the nature of a 'guess' at the life of equipment, and 'guessing' is not the business of the accountant" (p. 52). The rule regarding charges for property abandoned, in which a distinction is made between *vertical* and *lateral* abandonment, is held to be "inconsistent in many cases and likely to work hardships, but the Supreme Court has upheld the commission in this rule" (p. 53).

In the reviewer's opinion, the most useful portion of Mr. Hooper's book, and that which will be appreciated greatly by railroad students, is that dealing with railroad accounting and financial organization. There is very little literature on this general subject available. The best account hitherto published is a report made about ten years ago to the International Railway Congress by Mr. A. H. Plant, comptroller of the Southern Railway. The bookkeeping methods and auditing devices relating to the numerous varied and complex activities of railroads are exceedingly difficult to fully and plainly describe in a single volume. The accounting of revenues from the issuing of the way-bill on the passenger ticket until the money reaches the general treasury of the company, and the auditing of disbursements from the authorization of the expenditure to its final allocation and analysis in the periodical expense account, involve an elaborate systemization and the application of strict methods of routine. "Red-tape" can not be entirely eliminated, but American railroad managers have been more successful in avoiding it than have the federal and state governments.

The inclusion of illustrations of numerous accounting forms used by the large railroad systems is commendable, but it is to be regretted that so little care was shown in their arrangement. Some of the forms have been so much reduced in size by photographic process that they are illegible. Others are so placed on the page that they can not be readily distinguished from the text.

The insertion of the complete text of the Interstate Commerce Commission's accounting classifications at the end of certain chapters is certainly a detriment to continuity in the book. They would serve better as appendixes. Indeed, it is doubtful whether any advantage, other than an enlargement of almost 150 pages, is gained through the insertion of these texts. The bulletins of the Interstate Commerce Commission are readily obtainable. Moreover, they are revised almost annually, and it is not assumed that the publishers will put out a new edition of Mr. Hooper's book each time a revision is made.

A. M. SAKOLSKI.

Albany, N. Y.

NEW BOOKS

- AUGHINBAUGH, W. E. *Selling Latin America. A problem in international salesmanship. What to sell and how to sell it.* (Boston: Small, Maynard. 1915. Pp. vi, 408. \$2.)
- ALLEN, I. R. *Personal efficiency, applied salesmanship, and sales administration.* (Chicago: LaSalle Exten. Univ. 1915.)
- BATESON, W., editor. *Pitman's municipal office organization and management.* (London: Pitman. 1915. Pp. 483.)
- BELL, S. *A report on accounting and financial administration for correctional institutions.* (Springfield, Ill.: Efficiency and Economy Committee. 1915.)
- BLANTON, B. H. *Credit, its principles and practice.* (New York: Ronald Press Co. 1915. Pp. 319. \$2.)
- CHAMBERLAIN, O. H. *Salesmanship; a group of nine special articles.* (Chicago: Office Appliance Co. 1915. Pp. 52, illus.)
- CHAPMAN, H. H. *Forest valuation.* (New York: Wiley. 1915. Pp. xvi, 284. \$2.)
- DAVIES, E. *The hundred best investments. With special article on the war and investments.* (London: British, Foreign, and Colonial Corporation. 1915. 1s.)
- DIEMER, H. *Industrial organization and management.* (Chicago: LaSalle Exten. Univ. 1915. Pp. xv, 291.)
- DECHESNE, L. *Economie industrielle et sociale, à l'usage des commerçants et industriels.* (Paris: Tenin. 1915. 2.50 fr.)
- DICKSEE, L. R. *Auditing.* Tenth edition. (London: Gee & Co. 1915. 10s. 6d.)
- DICKSEE, L. R. *Business methods and the war.* (London: Cambridge Univ. Press. 1915. Pp. 80. 2s.)

- ELLIOTT, H. P. *Direct by mail advertising*. (Cambridge, Mass.: Elliott Co. 1915. Pp. 53.)
- ESQUERRÉ, P. J. *Problems involving the application of the theory of accounts. For use in connection with "The applied theory of accounts."* Pt. 1, problems 1-32. (New York: Ronald Press. 1915. Pp. 69.)
- EYTINGE, L. V. *Writing business letters which get the business. A group of six special articles*. (Chicago: Office Appliance Co. 1915. Pp. 39, illus.)
- FISH, J. C. L. *Engineering economics*. (New York: McGraw-Hill. 1915. Pp. 217. \$2.)
- FRANKLIN, B. A. *Experiences in efficiency*. (New York: Engg. Mag. 1915. Pp. xi, 167. \$1.)
- FRIDAY, D. *Problems in accounting*. (Ann Arbor, Mich.: Ann Arbor Press. 1915. Pp. ix, 134. \$2.)
- GARDNER, E. H. *Effective business letters*. (New York: Ronald Press. 1915. Pp. xii, 276. \$2.)
- HALL, S. R. *Writing an advertisement*. (Boston: Houghton Mifflin. 1915. Pp. 216. \$1.)
- HARRIMAN, G. W. *Railroad valuations; a treatise on methods for the valuation of property of common carriers, based on the specifications of the valuation act and the decision of the United States Supreme Court*. Pt. I. (Boston: Wright & Potter. 1915. Pp. 74.)
- HAYES, H. V. *Public utilities; their fair present value and return*. (New York: Van Nostrand. 1915. Pp. viii, 207. \$2.)
- HUMPHREY, J. R. *A system of accounts for farmers' coöperative elevators*. (Washington: Dept. of Agriculture. 1915. Pp. 30. 10c.)
- KIXMILLER, W. and SPENCER, W. H. *Business law, case method*. (Chicago: Commerce Clearing House. 1915. \$12.)
- KLEIN, J. J. *Elements of accounting theory and practice*. Revised edition. (New York: Appleton. 1915. Pp. xvi, 422. \$1.50.)
- KLEIN, J. J. *Student's handbook of accounting. Solutions to questions in theory of accounts, practical accounting, and auditing contained in "Elements of accounting," for the use of teachers, students, and practicing accountants*. (New York: Appleton. 1915. Pp. vi, 136. \$2.)
- To be reviewed.
- LAKE, N. W. *Handbook of Rhode Island investments, March, 1915*. (Providence, R. I.: E. A. Johnson & Co. 1915. Pp. 20. 15c.)
- LALL, T. R. *Standard classification of accounts for the use of the city and county of Denver, Colorado, with explanatory statements and ready reference index*. (Denver: Colorado Taxpayers Protective League. 1915. Pp. 57.)

- LISSENDEN, G. B. *Industrial traffic management*. (London: Pitman. 1915. Pp. 260. 7s. 6d.)
- McCARTY, R. J. *Federal valuation of railroad property*. (Kansas City, Mo.: The author, 3820 Warwick Blvd. Pp. 103.)
- MARKER, W. H. *Marker's interest and bond tables*. (Indianapolis: Monarch Prtg. Co. 1914. Pp. 119. \$2.)
- MARTIN, M. *Modern methods of merchandising*. (Minneapolis: Architect Bull. Co. 1915. Pp. 30, illus. \$1.)
- MARTIN, M. *Planning an advertising campaign for a manufacturer*. (Minneapolis: Univ. of Minn. 1915.)
- MOODY, J. *Moody's analyses of investments*. Pt. I. *Steam railroads*. Sixth annual number. (New York: Moody's Investors Service. 1915. Pp. 15-932. \$15.)
- NAHSTOLL, G. A. *A system of accounting for coöperative fruit associations*. (Washington: Dept. of Agriculture. 1915. Pp. 25. 5c.)
- NICHOLS, H. W. *A method of determining costs in a cotton mill*. (New Bedford, Mass.: E. Anthony & Sons. 1915. Pp. 115. \$3.)
- PREEN, H. *Reorganisation and costings*. New and enlarged edition. (London: Simpkin Marshall & Co. 1915. Pp. viii, 188. 2s. 6d.)
- RANKIN, E. H. *The "Cleveland" pay roll calculator for hourly rates of wages*. (Cleveland: J. B. Savage Co., 164 Prospect St. 1915. \$3.50.)
- ROPP, C. *Ropp's price marking tables and profit and loss indicator*. (Chicago: C. Ropp & Sons. 1915. Pp. 39. \$5.)
- SALIERS, E. A. *Principles of depreciation*. (New York: Ronald Press Co. 1915. Pp. xii, 200. \$2.50.)
To be reviewed.
- SHAW, A. W. *Some problems in market distribution*. (Cambridge: Harvard Univ. Press. 1915. Pp. 135. \$1.)
- SPRAGUE, C. E. *Complete bond tables to eight places*. Fourth edition. (New York: Ronald Press. 1915. Pp. 234. \$6.)
- STEPHENSON, G. *The pricing of quantities*. (London: Constable. 1915. Pp. 222. 3s. 6d.)
- TAYLOR, A. G. *Progressive course in salesmanship*. (Chicago: J. Watson & Co. 1914. \$8.)
- THOMPSON, M. J. *Thompson on sales of stocks and bonds*. (Chicago: Barnard & Miller. 1915. Pp. xxv, 208. \$3.)
- The library of factory management*. Vol. IV. *Labor*. (Chicago: A. W. Shaw Co. 1915. Pp. 216. \$3.)
- List of railroad bonds considered legal investments for savings banks by the banking departments of the states of New York, Massachu-*

setts, Connecticut, Vermont. (New York: White & Kemble. 1915. Pp. 27. 50c.)

Rules and regulations of the Secretary of Agriculture under cotton futures act of August 18, 1914. (Washington: Dept. of Agriculture. 1915. Pp. 24. 5c.)

Stock exchange official intelligence. (London: Spottiswoode. 1915. Pp. 1,798. 50s.)

1915 C. P. A. examinations and solutions, vol. I. (New York: Ronald Press. 1915. Pp. 300. \$3.)

Gives examinations of Wisconsin, April, 1914; Ohio, November, 1914; Pennsylvania, November, 1914; and New York, January, 1915. Solutions are by Walter P. Kohr, Cleaveland R. Cross; F. H. Elwell; Paul-Joseph Esquerre; Thomas Conyngton; and others. Volume II for 1915 is to be issued in December and will contain four examinations.

Capital and Capitalistic Organization

NEW BOOKS

CURTIS, E. N. *Manual of the Sherman law. A digest of the law under the federal anti-trust acts.* (New York: Baker, Voorhis & Co. 1915. Pp. xliii, 383. \$3.50.)

DURAND, E. D. *The Trust Problem.* (Cambridge: Harvard University Press. 1915. Pp. 145.)

To be reviewed.

EMERY, J. A. *Handbook of the federal trade commission act.* (New York: National Council for Industrial Defense, 30 Church St. 1915.)

ESTABROOK, H. D. *The law merchant vs. the law of politicians. A diagnosis of the case of American business.* (New York: The Market World. 1915. Pp. 16.)

PERKINS, G. W. *The Sherman law. Where it has failed, why it has failed, and a constructive suggestion.* (New York: The Market World. 1915. Pp. 23.)

PHELPS, E. M., compiler. *Selected articles on federal control of inter-state corporations.* Second edition, enlarged. (White Plains, N. Y.: Pp. 270. \$1.)

WHITE, F. *White on corporations; containing the laws as amended to January 1, 1915.* Eighth edition. (New York: Baker, Voorhis. 1915. Pp. xi, 1858. \$10.)

A practical plan for public ownership and operation of natural resources. (Charleston, W. Va.: Lovett Prtg. Co. 1915. Pp. 44. 50c.)

Public utilities reports annotated, containing decisions of the public service commissions and of state and federal courts. (Rochester, N. Y.: Lawyers Coöperative Pub. Co. 1915. Pp. xxxi, 1241. \$5.)

Labor and Labor Organizations

Out of Work. A Study of Unemployment. By FRANCES A. KEL-
LOR. Second edition, enlarged. (New York: G. P. Putnam's
Sons. 1915. Pp. xiii, 569. \$1.50.)

As a popular presentation of the unemployment problem the first edition of this book, published in 1904, performed a valuable service in that it reached a class of readers generally not within the pale of scientific treatises. It presented sympathetically and convincingly the hardships and injustices inflicted upon the unemployed by the American way of marketing labor. The second edition, formulating the effective data gathered through personal investigations of the author and her co-workers into a scientific presentation of the economic problem of unemployment, offers little new to students of the question in the way of helpful constructive criticism. Falling short of the standards set by Beveridge and the Webbs in their clear scientific analyses of the subject and comprehensive generalizations, the book loses much of its value in departing from its earlier popular form.

It lends itself to three general divisions: (1) description of industry from the standpoint of the exploited unskilled worker—women, children, and immigrants; (2) American methods used in distributing labor through public and private labor agencies; and (3) remedial measures in operation with suggested programs of reform.

Women as a class of industrial workers are more subject to unemployment than men in that much of their work is seasonal and can not be easily supplemented in periods of industrial depression with work in new, if not related, lines. The unemployment of men increases the number of women wage-workers, for many of them enter industry for the first time in their attempt to eke out a scanty family income. Children, too, take the places of adult workers and aggravate the unemployment problem, while the nature of their industrial occupations does not train them for future efficient workmanship.

The author challenges the conclusions reached by many students of immigrant labor problems, *viz.*, that immigrants displace Americans in certain industries; that they are often "birds of passage"; and that they lower the standards of living of American workmen. Her spirited defense of the immigrant's position in American industry precludes an unbiased presentation of the problems.

That unregulated private employment offices are a social menace is confirmed by a mass of effective illustrative material gathered principally in New York City. A general description of philanthropic agencies is given, and also an enumeration and critical analysis of city ordinances and state laws dealing with the problem.

In conclusion, two short-time programs, one national and one municipal, and a long-time program, are offered. The short-time national program is, briefly, "the establishment of a system of Federal employment bureaus"; regulation and extension of government work in slack seasons or periods of industrial depression; and provision made for sending settlers to the land. Finally, "there should go out from the President's office an urgent message to stimulate local governments of both cities and states to shoulder their burden uniformly." The short-time program for cities includes an extension of public works; the ascertaining of "the resources of industries, whether they are carrying as full a force as possible, whether they are giving the maximum of relief to their own dismissed employees, and whether their plants could be adapted to other work, the products of which may be in demand"; the establishment of sewing rooms and "temporary workshops for war supplies"; an odd job campaign; and direct relief giving when necessary.

The long-time or preventive program has five interlocking divisions: the obtaining of accurate information, the organization of the labor market, industrial organization looking toward the reduction of seasonal and casual labor, the direction of workers into industry, and some form of insurance which will relieve the unemployed.

Comprehensive programs, accepted by modern European countries as working policies, are not generally accepted as political expedients in the United States. Hence the work of the propagandist is still in its initial stage. Herein lies the main value of the book.

Theresa S. McMahon.

Report of the Bureau of Labor on the Conditions of Wage-Earning Women and Girls. State of Connecticut. CHARLOTTE MOLYNEUX HOLLOWAY, Industrial Investigator. (Hartford: Published by the State. 1914. Pp. 139.)

In 1913 the general assembly of Connecticut authorized an investigation of the conditions of women and girls employed in the

state in stores, public utilities, photographic, undertaking, millinery and dress-making establishments, hotels, restaurants, laundries, hair-dressing and barber shops, domestic service and tenement house work. Miss Holloway was appointed the investigator.

Since she "preferred to pursue a particular line of method which prevented the including of any one else" (p. 7), she did not use the possible aid of the Bureau of Labor Statistics, and "for the same reason no outside assistance was sought." Her method naturally limited the field of inquiry, and, excepting a brief chapter on telephone exchanges and another on hotels in the chief Connecticut cities, the report deals entirely with women and girls employed in stores. Detailed schedules were secured from 4,508 store employees, employers were interviewed and pay-rolls examined.

The employees were, for the most part, young native-born women of native or Irish parentage, and the group contained few members of the newer immigrant races; 34.86 per cent were in the age group 16-20; 90.88 per cent lived at home and practically all contributed to a family income, thus dealing another blow to the discredited pin-money theory; 52.3 per cent received less than \$8 a week, the largest wage group (614) receiving \$6. Miss Holloway agrees with the United States Bureau of Labor and the New York Factory Investigating Commission that custom exerts a strong influence on the wages of such labor, and that wages show little relation to age, education, or experience. Excepting among five and ten cent stores, she reports great uniformity in wages paid by stores throughout the state, but sanitary conditions and hours of work were found wholly unstandardized. The workers appeared helpless to remedy bad conditions even when other possibilities were conspicuous in neighboring establishments.

Living expenses were studied, and facts support the opinion of the experienced women interviewed, who agree that \$9 a week was necessary to decent living; 62.8 per cent of the group received less than this. The loss of income due to irregularity of work was not ascertained but is admitted to be important. Of more than 5000 employees, less than 220 are ranked as immoral, and these are not among the ill-paid.

The small appropriation (\$3000) perhaps necessitated an individual rather than a group survey. The avowed preference for it on other grounds seems unwarranted. The investigator is evidently a skilful interviewer, and has collected much interesting ma-

terial. Her verbatim reports of statements made by certain girls and women convey marvellously graphic impressions and constitute a valuable section of her report. But collaboration might have prevented some of the defects which obscure the merits of her work. The generalizations, when not based directly on the facts observed, are for the most part worthless, and the whole report is singularly ill-written.

The individual method has greatly limited the intended scope of the investigation, and the commissioner of labor statistics recommends a four years continuation, so that all the occupations specified in the Act of 1913 may be studied by Miss Holloway. This policy requires over five years for the whole task and prevents a survey which will show contemporaneous conditions in the several occupations. It thus weakens the Act of 1913 as a preliminary to early and efficient legislation concerning women wage-earners in Connecticut.

EMILIE LOUISE WELLS.

Vassar College.

Violence and the Labor Movement. By ROBERT HUNTER. (New York: The Macmillan Company. 1914. Pp. xiv, 388. \$1.50.)

The controversy as to the place of direct action in the tactics of the labor movement, which has disturbed American socialism for the last four or five years, is responsible for this study by Mr. Hunter. He has endeavored to review the more important instances of the adoption of violence as a weapon of labor, to show the unfortunate results of such tactics, and to analyze the psychology of the advocate of violence.

The historical parts of the work give a clear summary of terrorist movements in western Europe, since Bakunin's day. The battle between Marx and Bakunin is vividly pictured and ample quotations from documents not easily accessible give this part of the work special value. The connection between anarchism and the modern syndicalist movement is established; little, however, is said about the actual use made of any of the methods of direct action by the syndicalists of Europe, or their counterparts in America. A review of these matters would have been within the scope of the work and would have added to its value. There is, however, an admirable chapter dealing with what Mr.

Hunter calls the "oldest anarchism"—a scathing review of the extraordinary powers permitted to employers in the United States through the hiring of private standing armies of detectives and special officers.

Mr. Hunter has no difficulty in showing the inevitable failure, the public reaction against progressive measures, the moral degeneracy of the actors themselves, which follow in the wake of the terrorist. The psychology of the advocate of violence is analyzed with much skill. The reader feels, however, that Mr. Hunter is too much inclined to assume that the tactics of the bomb are the only alternative to political activity, so far as the socialist movement is concerned; to the general strike, for example, there are only brief references. There is little of that appreciation of the difficulties which face a socialist party in politics, the complexity and constant shifting of social and economic relationships, and the remarkable power of adaptation and resistance displayed by the capitalist system, which give Mr. Walling's book its note of reality and closeness to present facts. The book is, however, a valuable statement of the orthodox socialist views upon the matters covered, and Mr. Hunter has not allowed his own opinion upon the controversy to cloud or color his admirable presentation of the wide range of facts he has brought together.

O. D. SKELTON.

Queen's University.

NEW BOOKS

ASHWORTH, J. H. *The helper and American trade unions.* (Baltimore: Johns Hopkins Press. 1915. Pp. vi, 134.)

To be reviewed.

FERENCZI, E. *Die erste Arbeitslosenzählung in Budapest und in 24 Nachbargemeinden am 22.3. 1914.* (Jena: Fischer. 1915. 3 M.)

O'GRADY, J. *A legal minimum wage.* A dissertation. (Washington. 1915. Pp. 140.)

A survey of the minimum wage legislation of Australia, Great Britain, and the United States, and a clear presentation of such facts as are available relating to its operation and effects. A useful work.

ROBERTS, M. G. *Injuries to interstate employees on railroads.* (Washington: John Byrne & Co. 1915. \$6.)

TAWNEY, R. H. *The establishment of minimum rates in the tailoring industry; under the trade boards act of 1909.* Ratan Tata Founda-

tion. Studies in the minimum wage, 11. (New York: Macmillan. 1915. Pp. xiii, 274. \$1.25.)

To be reviewed.

Report of the Norwich conference of the independent labour party. (London: St. Bride's House. 1915. Pp. 127. 3d.)

Money, Prices, Credit, and Banking

Practical Banking. By RALPH SCOTT HARRIS. (Boston: Houghton Mifflin Company. 1915. Pp. x, 309. \$1.75.)

Banking Practice and Foreign Exchange. By E. L. STEWART PATTERSON and FRANKLIN ESCHER. Modern Business, Canadian Edition, Vol. VIII. (New York: Alexander Hamilton Institute. 1914. Pp. xx, 637.)

As stated in its preface, the first of these volumes "is intended for the student of finance who wishes a glimpse into the practical conduct of the bank." The author, however, has attempted too much for one small volume. In addition to practical banking, he has attempted to give a history of the evolution of banking, a discussion of national bank circulation, a description of clearing houses, of the principles of foreign exchange, a history of crises in the United States, and a discussion of the Federal Reserve Act; and these things he has not done well.

Chapters 2 to 14 give an intimate and interesting view of the work of the several officers, and of the organization and routine of the several departments of a typical national bank in the United States. This part of the book is from the author's personal experience. It is written from the human standpoint, not from the accountant's point of view; books and forms are not reproduced, though the principal books and records of a bank are described. The author's keen personal interest and enthusiasm for his subject make this part of the book an interesting contribution to the story of banking.

Outside these chapters (and they occupy less than half of the volume) the book has no special significance. The subjects covered in the remaining chapters have been treated more thoroughly and more accurately; and, furthermore, these chapters contain statements that are erroneous or inaccurate. For example, a statement on page 25 seems to indicate that the rate on call loans is likely to be lower during a financial stringency. On page 15 it is said that "The New York safety-fund plan, upon which our con-

temporary banking methods in this country are based, was worked out between 1837 and 1844"; and on page 168, that the New York Clearing House Association "is composed of thirty-two national banks, eighteen state banks, and the Assistant Treasurer at New York"—overlooking the membership of fifteen trust companies. On pages 152 and 153 the national gold bank law is mentioned with some professed bewilderment, the author evidently not being aware of the fact that this law was passed in 1870 during the suspension of specie payments, and that it has had no application since 1879. On page 278 the statement that the Federal Reserve Act "provides for the retirement of national bank circulation" is misleading, when given without qualification as to how rapidly the circulation may be retired.

Another defect is that the Federal Reserve Act, with the changes which it introduced in the national bank regulations, is added almost as an appendix. Throughout the book whenever regulations as to legal reserves, loans, etc., are mentioned, the old regulations are given, usually with a footnote reference to the altered regulations.

Banking Practice and Foreign Exchange is divided into three parts. Part I, Banking Principles, and part II, Banking Practice, are written by Mr. Patterson, acting inspector of the Canadian Bank of Commerce; and part III, Foreign Exchange, by Mr. Escher, editor of *Investments Magazine* and lecturer in the New York University School of Commerce, Accounts and Finance. The book makes little attempt to teach the elementary principles of banking, rather assuming that they have been taught in a preceding volume. The method throughout is to teach the general only through the concrete.

Part I (112 pages) is mainly an explanation of the terms of the Canadian bank act of 1913. It contains also a brief description of the monetary system of Canada; an exposition of the advantages of branch banking; and an analysis of an ideal bank statement. All of these are presented concisely and clearly.

Part II (300 pages) contains a very clear account of the organization, functions of officers, and the records of the head office and of the branch, with a description in some detail of the books and records of the branch; separate chapters are devoted to the deposit business, loans, classification of loans, advances on warehouse receipts, inspection, and bank cost-accounting. Since the

book is addressed to the prospective banker, it contains much advice on methods and forms, on safeguards, on the principles of sound credit, etc. The chapter devoted to advances on warehouse receipts and assignments presents this characteristic feature of Canadian banking in a very clear form; and the chapter on bank cost accounting is rather a new feature for textbooks on banking.

Parts I and II, on the whole, give a very clear description of the inside organization and machinery of a Canadian commercial bank in all important branches of its business. The emphasis is, possibly, too much on bank accounting, and on the forms of books and papers; but perhaps this is necessary if banking practice is to be taught from a textbook.

Part III (150 pages) differs from *Elements of Foreign Exchange* by the same author in being written primarily as a textbook; in describing more in detail the actual machinery of a particular transaction; and in giving more information as to forms, foreign money values, short-cuts in computations, etc. The fundamental theories of foreign exchange are set forth clearly in the *Elements*, but here they are somewhat buried under details of forms and particular transactions. The relation of Canadian exchange to New York exchange is explained, and methods are given for converting New York exchange into Canadian quotations. The Canadian point of view is abandoned in a large part of the work, however, when even the illustrations of import and export financing are taken from the United States instead of from Canada.

The book contains no discussion of banking in other countries than Canada, except an occasional comparison with the United States practice or regulations—and then always to show the superiority of the Canadian system. It especially contends that the Canadian system of internal inspection is superior to the American system of governmental inspection; that our legal reserve regulations probably do more harm than good; and that the Canadian branch banking system has many advantages over the American system of independent banks without branches.

Appendixes contain questions on rules for bank routine; quiz questions arranged by chapters; stamp duties on foreign drafts; and an explanation of the old method of quoting sterling exchange in Canada. The bibliography fails to give the place or date of publication of the books listed.

G. D. HANCOCK.

Washington and Lee University.

Les Règlements par Effets de Commerce en France et à l'Etranger.

By GASTON ROULLEAU. (Paris: Imprimerie Dubreuil, Frère-beau et Cie. 1914. Pp. 202. 7.50 fr.)

This statistical study of commercial instruments was awarded the Emile Mercet prize by the Statistical Society of Paris.

In the first chapter the nature of these instruments is described and their growth traced. Checks, drafts, warrants, and bills of exchange have, taken together, increased approximately 700 per cent during the period 1842-1912. The most important forces resulting in this increase, according to the author, have been the division of labor, and, as a partial consequent, constantly increasing foreign trade. Integration of industry has worked in the opposite direction, as did the Revolution of 1848 and the War of 1870-1871. Seasonal variations in the amount of bills during recent years have been such as to bring a minimum in August and a maximum in November. The autumnal increase is accounted for by reference to agricultural conditions. During the crop-moving season, payments of currency to farmers and increased activity in trade combine to call into existence a maximum amount of paper.

Chapters devoted to geographic distribution and the usage of bills for various trades in France are replete with statistical details. It should be of interest to us, now attempting to develop a system of acceptances, to note that French drafts vary in length from two or three days to ninety or more, mainly and roughly according to the degree of perishability of the commodities concerned, the shortest time applying to such highly perishable and readily saleable products as meats, and the longest to growing cattle, lumber and building materials. The average value per instrument coming to the Bank of France has steadily fallen from about 2000 francs in 1820 to 1500 in 1835, 1000 in 1880, and to an amount varying little from 600 francs during the last twenty years (ch. 4). The proportion of bills remitted to the Bank of France for discount and collection from 1845-1910 to the total amount varied but slightly from 40 per cent, and for more than a century the portfolio of that bank has held with little change from year to year an average of about 13 per cent of all French bills. While the development of the check system has been much slower in France than in other countries, there has, nevertheless, been notable progress. The amount of checks drawn doubled between 1880 and 1902, and the upward movement has been even more rapid in recent years (ch. 5).

As to the collection of bills (ch. 6), it is to be noted that an increasing concentration of maturities on definite days of the month has become very inconvenient to the banks, and the increasing number of places of business where collections must be made has rendered the work of the collector dangerous. The value of bills protested (ch. 7) has fallen during the last seventy years from approximately 4 per cent of the total to somewhat less than 1 per cent,—an index of improving business morality and general prosperity. Without entering deeply into the factors determining the rate of discount, the author makes plain the relation between the bank rate and the rate in the open market of Paris; and by means of numerous tables gives, in much detail, changes in both (ch. 8).

Foreign Countries and Colonies is by far the longest chapter in the volume. The negotiable paper of leading countries like Germany, England, Russia, Japan, United States, and of such minor states as Servia, Sweden, and Argentine Republic, is subjected to careful statistical treatment. Figures for the United States were obtained chiefly from reports of the Comptroller of the Currency and from Kemmerer's *Seasonal Variations in the Relative Demand for Money and Capital in the United States* (published by the National Monetary Commission). In the last and most interesting chapter of the book, International Comparisons, the author takes an opportunity to point out the growth in the volume of business paper in France as compared with the same in England and Germany, and to remind the reader of the advantage of the extraordinarily low and stable rate of discount which has long prevailed in France. Our own excessive use of finance bills is deplored.

It is to be regretted that the author has not distinguished carefully between the drafts used in connection with domestic and those with foreign trade. On the whole, however, it is a highly satisfactory volume.

CHESTER A. PHILLIPS.

Dartmouth College.

War and Lombard Street. By HARTLEY WITHERS. (New York: E. P. Dutton and Company. 1915. Pp. viii, 171. \$1.25.)

"It came upon us like a thunderbolt from a clear sky" is the opening line of Mr. Withers' new book, *War and Lombard Street*.

Just what followed the coming of the thunderbolt the author proceeds to tell in that clear and interesting way which made so popular his previous books, *Money-Changing* and *The Meaning of Money*. First there is taken up the moratorium and the various measures adopted to mitigate the force of the blow. Following that, there is discussed the internal problem with which Lombard Street found itself faced as a result of the measures taken. The external problem then is taken up, a remarkably lucid account being given of London's financial relationships with the outside world at the beginning of the war, and of how these relationships were affected.

To the man who is looking for a clear and concise account of what happened in the world's premier money market during the months immediately following the outbreak of the war these opening chapters of the book will probably prove the most interesting, but of even greater interest, perhaps, to the average American reader, will be that section of the book which the author has called *Afterthoughts*. There is taken up the question as to whether London is likely to lose to New York anything of her financial supremacy—with conclusions anything but flattering to New York. For America to become the world's banker, the author tells us, it was the "chance of a century." But New York, he goes on to say, utterly failed to rise to the occasion. When London called in her credits from other countries, any center that could have said to these countries, "We will give you the credit that London has cut off and lend you the money to pay London," would have stepped straight on to London's financial throne and set London a very difficult task to regain it after the war was over. But instead of doing that, "America feared to use its gold and held on to it as tightly as it could, fearful of internal trouble and a run on its banks if too much of the metal went abroad So far was New York from being able to supplant London, that, as we have seen, the United States had to make special arrangements to tide over the difficulty which London's claims on her had produced."

Mr. Withers is a very good Englishman indeed and points out with pardonable pride how the London market stood the shock which rocked the rest of the financial world to its very foundations. What would have been his attitude had the book been written a little later, however, when the pound sterling had fallen to a discount of over 2 per cent as compared with the dollar, is an interesting subject of speculation. London financing the world is, from the

Englishman's point of view, an inspiring sight, but the pound sterling obtainable in New York for \$4.76 (as at the time of writing) is something which it would be interesting to hear Mr. Withers explain. *War and Lombard Street* treats only with the beginning of a very big subject. It is sincerely to be hoped that a little later we shall have a continuation of the work from Mr. Withers' pen.

Valuable information is contained in a series of appendixes giving the text of (1) the general moratorium, (2) the various measures dealing with bills of exchange, (3) the measures for providing paper currency, (4) the courts emergency powers act.

FRANKLIN ESCHER.

NEW BOOKS

DECK, F. *Die Pfälzische Bank. Ein Beitrag zur Geschichte des deutschen Kreditgenossenschafts- und Bankwesens.* Volkswirtschaftliche Abhandlungen der badischen Hochschulen, 28. (Karlsruhe: G. Braun. 1914. Pp. ix, 120. 2.40 M.)

HEAD, R. P. *Table of reserves, compiled for the use of the member banks of the federal reserve system.* (Gainesville, Tex.: C. M. Buckingham. 1915. Pp. 23.)

INGLIS, J. G. *The "ideal" rupee and S.S. dollar exchange reckoner.* (London: Gall & Inglis. 1915. 3s. 6d.)

JENNE, W. *Die Spar- und Leihkassen der Schweiz.* (Zurich: Füssli. 1914.)

LOECK, P. *Preussisches Stempelsteuergesetz.* (Berlin: J. Guttentag. 1914. 8 M.)

MORMAN, J. B. *The principles of rural credits. As applied in Europe and as suggested for America.* (New York: Macmillan. 1915. Pp. xviii, 296. \$1.25.)

To be reviewed.

SOMARY, F. *Bankpolitik.* (Tubingen: J. C. B. Mohr. 1915. 6 M.)

WEBER, A. *Depositenbanken und Spekulationsbanken.* Second edition revised. (Munich: Duncker & Humblot. 1915. Pp. xvi, 384. 10 M.)

Commercial paper and bills of exchange of the world. (London: Banking Law Journ. 1915. \$1.50.)

History of the Standard Bank of South Africa, Ltd., 1862-1913. (Glasgow: R. Maclehose & Co. 1914. Pp. xii, 251.)

Index-digest of the federal reserve act and amendments. (Washington: Supt. Documents. 1915. Pp. 490. 75c.)

Work of the remedial loan societies, 1913-1914. (New York: Clover Press. 1915.)

Public Finance, Taxation, and Tariff

An Economic Analysis of the Constitutional Restrictions upon Public Indebtedness in the United States. By HORACE SECRIST. (Madison: University of Wisconsin. 1914. Pp. 131. \$.40.)

This is a doctor's thesis, published as No. 1, Vol. 8, of the Wisconsin "Economic and Political Science Series," and comprises a useful body of information, based, apparently, on a careful examination of material, with a critical estimate of the working of constitutional restrictions on public indebtedness, and a discussion of the means by which a more satisfactory system of control may be attained. The treatment of the question is in two divisions, one dealing with restrictions on the indebtedness of states, the other with restrictions on the indebtedness of municipalities. Each division is preceded by a historical sketch of the growth of indebtedness, the abuse of the borrowing power, and the use of public credit to subsidize private enterprise.

The great increase of state debts occurred in the third decade of the last century as a result of the enthusiasm for internal improvements: an increase from \$13,000,000 in 1830 to \$183,000,000 in 1839, which left some states bankrupt and others on the road to bankruptcy. Constitutional restrictions on the amount of debt, unless authorized by popular vote, on the period for which loans might run, on the loan of state credit to provide enterprises, and requirements that the creation of loans should be accompanied by provision for their payment by taxation began in the forties and became general in the fifties. These restrictions, however, were not generally interpreted as applying to local bodies, which in the decade following the Civil War went through much the same experience that the states had gone through a generation earlier, the indebtedness of cities increasing from \$221,312,000 in 1866 to \$604,832,000 in 1876. The result was the extension to local bodies of restrictions similar to those previously applied to the states.

In the chapters devoted to the criticism of the policy of constitutional restriction, the author holds that while the prohibition of the loan of public credit to private enterprise is fully justified, the restrictions on the borrowing power grew out of economic condi-

tions and a social philosophy which have passed away, and are necessarily general, arbitrary, and rigid in character. They have failed to accomplish the purpose intended and are not adapted to present needs.

In his constructive argument, as applied to the states, Dr. Secrist dwells upon the broad field for the legitimate use of the borrowing power which has developed with changes in our economic conditions and social philosophy and urges that the restrictions imposed should be directed to enforcing payment of debt rather than to limiting its amount. In regard to local indebtedness he makes clear that the question is one of administrative control rather than of constitutional restriction. Emphasis is laid on the good results accomplished by the Local Government Board in England and the Municipal Securities Act and Railway and Municipal Board in Ontario.

The facts in regard to constitutional restriction are conveniently summarized in tabular form and a bibliography is appended.

An occasional test of the tables and references gives the impression that the work is not free from errors in details.

HENRY B. GARDNER.

Brown University.

NEW BOOKS

- BRUNI, A. E. *Il debito pubblico Italiano*. (Milan: Ulrico Hoepli. 1915. Pp. xii, 444.)
- DEMORGNY, G. *Les institutions financières de la Perse*. (Paris: Leroux. 1915. 3.50 fr.)
- GLOVER, J. *Income-tax reform*. (London: Sheratt & Hughes. 1915. Pp. 24. 1s.)
- GRAHAM, H. J. *Abstract of emergency revenue act of 1914*. (Louisville, Ky.: Business Prtg. Co. 1915. Pp. 48. 25c.)
- HARRISTOV, J. *Les opérations financières de la France pendant la guerre de 1870-1871*. (Paris: Giard & Brière. 1915. 2 fr.)
- JÈZE, G., BARTHÉLEMY, J., RIST, C., and ROLLAND, L. *Problèmes de politique et finances de guerre, leçons professées à l'Ecole des hautes études sociales*. (Paris: Alcan. 1915. 3.50 fr.)
- LONGCOPE, E. M. *Things taxable—and not*. (Houston, Tex.: E. M. Longcope. 1915. Pp. 67. \$1.)
- MAXEY, R. E. L. *New form of government; taxation and tariff question solved*. (Pittsburgh, Pa.: Keystone Prtg. Co. 1915. Pp. 51. \$1.)

MEISEL, F. and SPIETHOFF, A. *Oesterreichs Finanzen und der Krieg*. (Leipzig: Duncker & Humblot. 1915. 0.80 M.)

MICHEL, E. *La valeur immobilière du territoire français envahi au 15 novembre 1914*. (Paris: Berger-Levrault. 1915. 1 fr.)

TAUSSIG, F. W. *Some aspects of the tariff question*. (Cambridge: Harvard University Press. 1915. Pp. x, 374. \$2.)
To be reviewed.

City really tax digest, \$500 and up, Atlanta, Georgia. (Atlanta: Retail Credit Co. 1915. Pp. 117. \$25.)

The government of the city of New York. Proceedings of the Academy of Political Science, V, 3. (New York. 1915. Pp. iv, 263.)

Contains a chapter of 15 pages on "Financial administration, budget and tax rate," by William A. Prendergast with remarks by Thomas W. Lamont and Edwin R. A. Seligman.

Proceedings of the tax conference and fourth annual meeting, Feb. 11-12, 1915. (Columbus: Ohio Municipal League. 1915. Pp. 76.)

Readjustments in taxation. Annals of the American Academy of Political and Social Science, 147. (Philadelphia. March, 1915. Pp. v, 275.)

Contains a chapter on "Newer tendencies in American taxation," by Professor Seligman; sections on national taxation and state problems and their solution; and twelve papers relating to local taxation.

Statement of the expense and receipts of Baltimore's eleven municipal markets for the year 1914. (Baltimore: Munic. Journ. 1915. Pp. 4.)

Virginia: tax laws, 1915, with the provisions of the code and acts of assembly in relation to the duties of the commissioners of the revenue and treasurers of the several counties and cities. (Richmond. 1915. Pp. 168.)

Population and Migration

NEW BOOKS

ASHBY, H. T. *Infant mortality*. (London: Putnam. 1915.)

DU BOIS, W. E. B. *The negro*. Home university library. (New York: Holt. Pp. 252. 50c.)

MILLIS, H. A. *The Japanese problem in the United States*. (New York: Macmillan. 1915. Pp. xxi, 334. \$1.50.)

THOMPSON, W. S. *Population: a study in Malthusianism*. Columbia University studies in history, economics and public law, LXIII, 3. (New York: Longmans. 1915. Pp. 216. \$1.75.)

Social Problems and Reforms

The Middle West Side: A Historical Sketch. By OTHO G. CARTWRIGHT. *Mothers Who Must Earn.* By KATHARINE ANTHONY. (New York: Survey Associates. 1914. Pp. xiii, 60, 224. \$2.00.)

The present volume is one of two groups of *West Side Studies*, originally planned as part of a wider survey, undertaken by the Bureau of Social Research of the New York School of Philanthropy with funds supplied by the Russell Sage Foundation. The investigations were made under the direction of Miss Pauline Goldmark during 1910, 1911, and 1912 by junior and senior fellows of the school.

The Middle West Side presents a historical sketch designed "to introduce a group of social investigators to their field of work." The neighborhood is that "neglected and little known" part of the island of Manhattan comprising the 80 blocks between 34th and 54th Streets, the Hudson River, and Eighth Avenue. The main facts of industrial and social significance in the development of this region are set forth in brief and attractive narrative: the early Dutch settlement, the city plan of 1807, the speculation in real estate, the sanitary survey in 1864, the water front and transit development, the coming of the industries, and the present picture of the vast, monotonous district of "dumb-bell" tenements inhabited by German and Irish foreign-born in the older generation, with other and smaller foreign elements of recent addition, and two negro settlements of considerable size. The geography and development of the district are such that it has never been, and is not today, an integral part of the city life. Absentee landlordism, changing industries, and undeveloped possibilities have combined to hedge in a curiously permanent population, engaged chiefly in unskilled and casual labor, deprived of the opportunities of the more prosperous sections of the city, and without even the dynamic and picturesque quality of life which belongs to the more congested East Side.

Mothers Who Must Earn is a study of the work and wages of 370 mothers and the effect of their gainful employment upon family life. Addresses were obtained from schools and philanthropic societies doing work in the neighborhood and visits were made at the homes and places of employment of working mothers. The appendix contains the schedules used and the outlines for indi-

vidual and family histories, quotations from which are generously interpolated throughout the text.

One third of the women forced to work outside the home were widows, but an even larger number (44.1 per cent) had husbands more or less regularly at work; and those with permanently idle husbands not incapacitated were also an important factor. The heaviest burdens were often borne by women whose husbands were living at home but were incapacitated for work through illness or accident. Work by the day at all kinds of household tasks, cleaning office buildings and theatres, and janitress and laundry work are the occupations which, in the order named, claimed the largest numbers of the women studied. In combination with heavy burdens at home all these occupations presented problems of bad working conditions with long hours and low wages. More than one half of the women earned less than six dollars a week. Scrub-women in department stores, who work eight or nine hours a day, make only a dollar a week more than office cleaners, who work only five or six hours a day; but the need of the extra dollar is so great in some households that women are forced to give the longer hours to secure it.

The difficult matter of annual incomes is fearlessly attacked by the writer and estimates are made from the statements of the mothers. By this method it was found that "in families where the mother alone was at work, her average earnings were 88 per cent of the average family income." The mother's earnings were lowest where the family income was highest. Perhaps the temptation to use statistical analysis is carried to the boundary for legitimate generalizations on so small a numerical basis. The numerous tables are, however, clear and well designed, and thirty illustrations contribute to the interest of the survey as a whole. The graphic portrayal of a community's needs is already awakening interest in a long neglected section of New York.

AMY HEWES.

Mount Holyoke College.

Working Girls in Evening Schools. A Statistical Study. By MARY VAN KLEECK. (New York: Survey Associates, Inc. 1914. Pp. xi, 252. \$1.50.)

Whatever may have been the motive of the investigation, the real interest for the majority of the readers of this book will prob-

ably lie in the vivid picture of the evening schools and their problems. For here are presented, in a very realistic way, some of the most complex and least solved problems in present-day education—the fundamental difficulties underlying an effective system of continuation schooling for busy workers of all nationalities and stages of maturity and education, handicapped by varying degrees of physical and mental weariness.

The investigation was extensive in method, covering 48 high, trade, and elementary evening schools, including all but five evening schools in Manhattan, the Bronx, and Brooklyn. Through coöperation with principals and teachers, a valuable collection of statistics concerning 13,141 girls, 84 per cent of the average attendance, has been secured and presented in detailed tables in an appendix of 25 pages. These statistics and the accompanying discussion show the great diversity of daily occupations, the strain of the long working day, the immaturity of the majority of the pupils (three fourths were under 21 years of age), and the great variation in educational background, on which the school must build. How and to what extent the evening school may supplement the several hundred daily occupations, as the commercial high schools have long done for the clerical occupations and as the Manhattan Trade School is beginning to do for the sewing trades, is the problem put before the educator.

The solution depends on the desire and physical capacity of the young worker to continue at night the work carried on during the long working day in the industries. The experience of Massachusetts in her system of state-aided evening schools is suggestive. The references to this system are a bit misleading for there are two types for women. That described and operating under the law of 1911 offers "trade extension" courses "dealing with the subject matter of the day employment." But one, the Boston Evening Trade School, operates under this law, which with liberal interpretation, enrolled in 1913-1914, only 172 women, 72.1 per cent of whom were over 25 years of age. The predominant type offering "practical arts" courses and enrolling 5740 women (48 per cent over 25 years old) operates under the law of 1912 and is open to all women over 17 years employed in any capacity during the day. In the Worcester Evening Trade School, which is extremely well organized on trade standards, only 17.5 per cent of the 704 women enrolled (1914-1915) were employed in related occupations,

and 51 per cent were over 25 years of age. The types attending illustrate the difficulties of attracting young industrial workers for supplementary evening trade training, either because they have not recognized the benefit of it, or because they are too tired or are unwilling to spend their evenings in trade atmosphere.

MAY ALLINSON.

Historical Essays on Apprenticeship and Vocational Education.

By JONATHAN FRENCH SCOTT. (Ann Arbor, Michigan: Ann Arbor Press. 1914. Pp. 96.)

The contents of this pamphlet are: a brief monograph on the development of English apprenticeship from its beginnings to the Statute of Artificers in the reign of Queen Elizabeth, together with some comments on the enforcement of the statute; an essay on Apprenticeship as Education; another on The Decline of the English Apprenticeship System; a third entitled Economic Reasons for Vocational Education in America—all three essays being reprints from pedagogic journals.

Dr. Scott makes a genuine contribution to scholarship in proving that in the beginning the apprenticeship system "was only one of several ways of obtaining the freedom of the craft or of the municipality." Patrimony and redemption, the two other ways, were in continual use for a long time and were only gradually abolished. The rest of the monograph is largely taken up with a discussion of the Statute of Artificers. This important legislative landmark in economic history is lucidly analyzed: but some exception might be taken to the discussion of the economic conditions which gave rise to its enactment, particularly the statement that "Generally speaking, the government during the sixteenth century was distinctly disposed to protect the peasantry against the agrarian changes which were taking place."

The three essays which are included with this monograph are of unequal merit. Apprenticeship as Education is but a restatement of certain widely known facts about the guild system, together with a somewhat captious criticism of Sombart anent the relative ability of artisan and artist. The second essay, on the other hand, is well done. The efforts of the government to bolster up the apprenticeship system are shown "by a law passed near the end of the sixteenth century compelling persons, whether they liked it or no, to receive apprentices assigned and bound out to them by the par-

ish authorities." And this law was enforced, as is evinced by the complaint of an irate vicar who discovers that a girl is bound over to him, much against his wishes, to be taught husbandry. The government, however, could not stem the tide, and the institution of apprenticeship was "metamorphosed into the practice of child-labor."

The concluding essay takes us far afield from apprenticeship. It is a warm plea for vocational education in this country, apparently on the German model, without recognition of those dangers to democracy which Professor Dewey of Columbia intimates may prove to be an unfortunate accompaniment of a too technical education in the public schools.

WALTER P. HALL.

Princeton University.

Government Aid to Home Owning and Housing of Working People in Foreign Countries. Bulletin of the United States Bureau of Labor Statistics, No. 158. (Washington: Government Printing Office. 1915. Pp. 451.)

Twenty years ago the United States government, through the Commissioner of Labor, made three important reports bearing on the subject of housing: the report of 1893 on *Building and Loan Associations*; the report of 1894 on *The Slums of Baltimore, Chicago, New York, and Philadelphia*; and the report of 1895 entitled *The Housing of Working People*. The last of these treated improved housing in Europe by philanthropic, coöperative, and industrial agencies together with some study of sanitary and building laws, expropriation, and public intervention. In 1904, the United States Labor Bulletin No. 54 contained a report by G. W. W. Hanger on Housing the Working People in the United States by Employers. Since that time there has been no important contribution from federal sources until the publication in 1915 of Bulletin No. 158. This bulletin covers much the same ground as the commissioner's report of 1895, but with a shift of emphasis from model housing to governmental assistance in house construction and governmental house building.

The report begins with a very brief summary of European and Australasian forms of state assistance to housing and proceeds to a consideration of state-aided housing by countries, treating Austria, Belgium, Denmark, France, Germany, Great Britain, Hun-

gary, Italy, Netherlands, Norway, Sweden, Australia, and New Zealand rather fully, and a few other countries briefly. In several countries the laws affecting house construction and sanitation are mentioned and to some extent described. But emphasis is placed upon the following measures: tax exemption or tax reduction for improved houses, state loans or state-guaranteed bank loans to house builders, the leasing of land on easy terms by the state for house construction, expropriation laws, land increment taxation, municipal and state house building. The content of this report is thus very similar to that of the *First Annual Report of the Massachusetts Homestead Commission* published in 1914, but covers fewer countries and fewer types of housing policy and is, on the whole, more systematic in its treatment of the policies examined.

The only other recent work in English which covers this field is the *Report of the Commission of Inquiry into the Housing of Workmen in Europe and America*, prepared by Professor Robert F. Irvine of the University of Sidney for the legislative assembly of New South Wales and published in 1913. Professor Irvine, however, treats very largely of existing housing conditions and private methods for dealing with housing not covered by the United States report. Of all of the available material in English on this subject, therefore, the federal report is the most valuable for the countries treated. It is especially useful as a handbook of European public housing policy. The serious limitation upon the report is its purely descriptive character. The effects of housing legislation are granted only cursory treatment, where they are examined at all. The comparative utility of the measures outlined is not considered.

JAMES FORD.

Harvard University.

Work and Wages. In Continuation of Earl Brassey's "Work and Wages." Part III. Social Betterment. By SIDNEY J. CHAPMAN. (London: Longmans, Green and Company. 1914. Pp. vii, 380. \$3.00.)

"Inheritance is from germ cell to germ cell. The degradation of the parent does not carry with it the degeneracy of the child." It is not the germ cells alone, however, but the germ cells and their culture (provided by environment), that make each society what it is. The racial stock remaining potentially the same, immense

betterment is possible in the social system. Improved environment means that fewer are ill-nourished and under-educated, and that fewer are born and bred in the dinginess which tends to destroy or prevent the sense of enjoyment. Accepting these underlying principles, Professor Chapman gives an admirable account of the following social problems: housing reform, public health, vocational guidance, labor conditions of home workers and shop assistants, and public charities. He writes with particular reference to living and working conditions in England today.

The housing problem, apparently, is as serious in the cities of the United Kingdom as it is in America. The haphazard growth of towns in the past has left as a heritage to the present the need of much costly site-clearing and rearrangement. The three evils which come to light when the present problem is analyzed are (a) over-crowding of areas, (b) over-crowding of families in houses, and (c) insanitary surroundings.

A far-sighted policy of town planning is suggested as the only way out of the present difficulty. A distinction is drawn between the idea of making a city convenient and beautiful as a whole, and the idea of making pleasant and healthful homes for the poorer classes. In the United States and in many continental cities the former idea has given the impulse to town planning. Interest in the welfare of small wage-earners is responsible in a large measure for town-planning movements in England.

In the chapter on public health, the author considers the very important question, whether physical deterioration is actually going on, and whether the waste of human energy by illness and needlessly early death can be and is being substantially reduced. He reaches the optimistic conclusion that there is little evidence to prove that the stock of modern communities is on the down grade, and that public authorities in England are beginning to see as never before the necessity of a vigorous campaign against disease. The familiar arguments for the proper feeding of school children, medical inspection of schools, and an educational policy which provides for continuation classes and efficient vocational guidance are restated under the heading, Training and Boy and Girl Labor.

An impressive situation comes to light in the discussion of the problems connected with home industry. Less than one hundred years ago factory work was popularly denounced because it took the workers from the home to the factory, where the wage-earners

were "slaves of the master's bell." Today, Professor Chapman tells us, home work is bitterly denounced for turning the home into a factory, and hiding work away. The home workers consist chiefly of women: (a) single women, widows, deserted wives who, being without any support, are forced to earn their own living; (b) more or less casual women workers, who enter the market when the male bread winner is temporarily incapacitated or out of work; (c) the women of families depending mainly on male wage-earners, who do work in their homes to add to the family income or to make pin money for themselves. Male adults are in the minority. The claim is advanced that overwork, low wages, under-nourishment, and infectious diseases develop from this home work and unregulated industry. As an illustration of one phase of the problem, the following incident is given: Recently, the wages of 50 girls were reduced from £1 0s. 4d. a week to 9s. 10d.—a reduction of more than 50 per cent. Public opinion in this instance forced the employers to arbitrate the dispute. The employers admitted before the arbitration board that the new scale was not a living wage, but succeeded in proving, to the satisfaction of the arbitrators, that another firm was paying rates even lower than the reduced wages they proposed to pay. The employers agreed to return to the old scale, if the board could persuade their closest competitors to do likewise. Under the existing law, unfortunately, the voluntary arbitration board could not demand the attendance of the competing employers, and nothing could be done to stop the bitter competition. In the author's opinion, trade boards will tend to prevent similar occurrences, by aiming to correct the evils of sweating, and by removing the hardships of disorganization now suffered by home workers.

The final chapter is a somewhat technical discussion of the value of public aid in general. On the one hand are those who emphasize the importance of individual responsibility and self-direction. According to this view of the social organization, public aid is liable to undermine permanently the self-reliance of beneficiaries. Public aid may also shake the self-reliance of others, and encourage people to drift into pauperism. On the other hand, there is a respectable minority who insist that the social reactions from public aid have been grossly exaggerated, that poverty is due, not so much to defects of character, as to circumstances over which the indi-

vidual or family has had slight control, and, finally, that material relief from public funds is in most cases beneficial.

WILLIAM KIRK.

University of Rochester.

Principles and Methods in Commercial Education. By JOSEPH KAHN and JOSEPH J. KLEIN. (New York: The Macmillan Company. 1914. Pp. xiv, 439. \$1.40.)

The authors of this pioneer work deserve commendation for the service they have performed on behalf of secondary commercial education. This field of education is seriously handicapped by inefficient teachers, most of whom have been too hastily and inadequately trained for their work, or have been, without any special training, transferred from other fields of instruction. The result is, indefinite conceptions of the relative values and purposes of the subjects taught, and ignorance of pedagogic methods pertaining to particular subjects. This book on methodology can not fail to prove useful as a text on commercial pedagogy in normal training of commercial teachers, and as a basis for discussion in teachers' meetings in secondary commercial schools. It should also prove useful to superintendents and boards of education in their administration of commercial schools or departments.

About a third of the book is devoted to a discussion of general problems: the essentials and value of a business education; the curriculum of the secondary commercial school; the relation of the secondary commercial school to the higher commercial school and to the business community; the preparation and equipment of the commercial teacher; general principles of pedagogic method. The remainder of the book discusses the content and particular pedagogic methods of specific subjects of the curriculum: business arithmetic; office practice and routine; bookkeeping; accounting; commercial geography; technique of commerce; history of commerce; commercial law; economics; business English; stenography and typewriting. Following each chapter are questions and a bibliography.

It is inevitable that in such a pioneer work the chapters should run unevenly, and should present views with which there can be disagreement. But the book as a whole promises such usefulness for the accomplishment of its primary purpose that to enumerate points of disagreement would be petty.

H. S. PERSON.

Amos Tuck School, Dartmouth College.

NEW BOOKS

BABSON, R. W. *The future of nations; prosperity, how it must come; economic facts for business men.* (Boston: Babson Statistical Organization. 1914. Pp. 123. \$1.)

BASHORE, H. B. *Overcrowding and defective housing in rural districts.* (New York: Wiley. 1915. Pp. 92. \$1.)

BEARD, M. R. *Woman's work in municipalities.* National Municipal League series. (New York: Appleton. 1915. Pp. xi, 344. \$1.50.)

The purpose of this volume is to give a survey of the extent and variety of women's civic activities for social betterment, and it would seem that every possible phase of women's work in this field is touched upon; education, public health, recreation, charity, corrections, civic improvement, and some more particular phases, all receive attention. A very large mass of illustrative material has been gathered together. The object of the book being to present a picture rather than to develop an argument, no attempt is made to discuss the significance of the activities illustrated, or to appraise their relative value. The author merely cites instances and quotes particular accounts gathered from a wide range of sources, chiefly periodicals, reports, and correspondence. The heterogeneous character of the information offers difficulties of presentation which the author points out in the preface but does not succeed in overcoming. The reader's mind can not but receive a confused impression from the variety and multiplicity of examples presented, unconnected by any thread of argument except perhaps an implied one. The classification of subject-matter is not always consistent. For example, the chapters on The Assimilation of the Races, Social Service, Housing and Civic Improvement, can show no clear lines of demarcation; also, topic headings within the chapters are often haphazard.

The book does present a large body of interesting illustrations of what is being done by women in municipal affairs, and no doubt has considerable suggestive value, even though it can not claim to be scientific. Its usefulness, however, from the above standpoint and as a work of reference would be considerably increased by a more detailed index and table of contents. The most serious criticism of the work from an academic standpoint is its almost complete lack of footnotes and references to sources used. In practically no case is the exact reference given, though the book largely consists of a series of readings.

BEATRICE H. SHEETS.

BERNHEIMER, C. S. and COHEN, J. M. *Boys' clubs.* (New York: Baker & Taylor. 1914. Pp. 136.)

A handbook on boys' clubs, discussing their aims, activities and problems, together with suggestions as to methods of conducting such clubs. One chapter is devoted to girls' clubs, and discusses special points of difference between the two. The last two chapters contain "concrete aids" for club leaders, i.e., material which can be used in the programs and the government of clubs.

B. H. S.

- BRIGGS, J. E. *History of social legislation in Iowa*. (Iowa City: Iowa State Historical Society. 1915. Pp. 14, 444. \$2.)
- CADBURY, G. *Town planning with special reference to Birmingham schemes*. (London: Longmans. 1915. Pp. xvi, 201, illus. \$2.25.)
- COIT, S. *The soul of America*. (New York: Macmillan. 1914. Pp. 405. \$2.)
- CRANE, D. *John Bull's surplus children*. (London: H. Marshall. 1915. Pp. 200. 2s. 6d.)
- CURTIS, F. R. *The collection of social survey material*. (Chicago: A. L. A. 1915. Pp. 15.)
- DAVIS, P., editor. *The field of social service*. (Boston: Small, Maynard. 1915. Pp. 436, illus. \$1.50.)
- ELDRIDGE, S. *Problems of community life*. (New York: Crowell. 1915. Pp. lx, 180. \$1.)
- In the author's words, "an analysis of community life . . . primarily descriptive," the method being "an enumeration of aspects of the subjects dealt with which merit attention." In an effort to present a comprehensive summary, suggesting both problems and their remedies, the author does not always escape vague platitudes and abstract repetitions. The volume nevertheless is suggestive and contains some original and interesting new phrasing of familiar social concepts; for example, in reference to the standard of living and the educational aim.
- BEATRICE H. SHEETS.
- FELTON, R. A. *A rural survey of — community, prepared in outline*. (New York: Board of Home Missions of the Presbyterian Church in the U. S. A. 1915. Pp. 97. 50c.)
- GREATHOUSE, C. A. *First annual report on vocational education in Indiana*. (Indianapolis: State Board of Education. 1915.)
- HALL, M. E. *Vocational guidance through the library*. (Chicago: American Library Association. 1915. Pp. 22.)
- HEDGES, A. C. *Wage worth of school training; an analytical study of six hundred women-workers in textile factories*. (New York: Columbia University. 1915. Pp. 173. \$2.)
- HAWORTH, P. L. *America in ferment*. (Indianapolis: Bobbs-Merrill. 1915. Pp. vi, 477.)

This is a book without a thesis, unless it be that of covering the gamut of modern economic and social problems in an "advanced" fashion. It deals with politics, history, economics, and now and then ethics and religion, with the happy touch of a best seller. It has a bibliography which may send a reader to some one of those who have worked with sources. On the other hand, the citation of authorities reflects a verisimilitude upon any one of innumerable utterances, which the utterances do not deserve. Withal the book is notable for rhetoric rather than substance.

F. A. DEWEY.

KIRKPATRICK, E. A. *The use of money; how to save and how to spend.* (Indianapolis: Bobbs-Merrill. 1915. Pp. 226. \$1.)

MALLOCK, W. H. *Social reform.* (New York: Dutton. 1915. \$2.25.)

RICHARDSON, N. E. *The liquor problem.* (New York: Methodist Book Concern. 1915. Pp. vii, 140. 50c.)

ROMAN, F. W. *Industrial and commercial schools of the United States and Germany.* (New York: Putnams. 1915.)

SHURTLEFF, F. and OLMSTED, F. L. *Carrying out the city plan. The practical application of American law in the execution of city plans.* (New York: Survey Assoc. 1914. Pp. ix, 349. \$2.)

A contribution to the technique of city planning from the legal point of view. It is based upon a careful digest of the legal principles and practices which have a bearing upon city planning, in a number of leading municipalities. Prime requisites to municipal activity in city planning are the powers of a municipality to acquire land, and to administer it for public purposes, and to limit private uses of land. The varying qualifications to which these powers are subject in different municipalities often present serious obstacles to the carrying out of a city plan. This volume will help serve as a guide and record of experience to those wishing to avoid such obstacles, or to secure their removal by more advanced legislation.

BEATRICE H. SHEETS.

TOLSTOY, L. *Social evils and their remedy.* (London: Methuen. 1915. Pp. 256. 1s.)

WELD, L. D. H. *Social and economic survey of a community in the Red River Valley.* The University of Minnesota current problems, 4. (Minneapolis: Univ. of Minnesota. 1915. Pp. iv, 86.)

We find here, in contrast to other rural surveys in this excellent series, not only a study of farm life but also an examination of the economic and social life of a rural village in its relations to the surrounding farms.

The town (with not quite 1500 people, by the census of 1910) appears as an organism abundantly nourished but not far advanced in the specialization and integration of its parts. The average of income is high. Of 174 heads of families whose incomes were ascertained and which, it is implied, are representative, the average is nearly \$1200 after omitting the two highest; the incomes of greatest frequency are those between \$700 and \$800. Only 12 men in the village are classed as laborers, unskilled, and only 17.6 per cent of the heads of families receive less than \$500 per year. The stores are too numerous (33 of all sorts) and suffer from the excessive competition which was characteristic of our large manufacturing industries before the period of consolidation. Their proprietors in very few instances realize profits beyond mere clerk's wages. In some instances their fairly comfortable earnings are to be explained as interest on capital accumulated in earlier years. Mail order houses

have not contributed seriously to the pressure of competition; only three to five per cent of goods of classes which they sell come from those houses.

The village shows the same marks as does the surrounding country of a community economically and socially undeveloped. On its social side it exhibits even less than in past times of the general community life so essential to a democracy. Distinctions of religion and nationality are held largely responsible for this. It seems typical that there are in the town eight lodges with an average attendance at meetings ranging from seven to twenty.

In both town and country there are indications of a tendency toward improvement like those noticeable in rural societies in other parts of the United States which have been investigated by students. Indeed, one can not think very badly of a village made up of immigrants, not far from pioneer days, in which the women maintain two fairly active literary circles, one German and one English, besides a women's club.

A. P. WINSTON.

Annual reports of the Federal Council of the Churches of Christ in America, for the year 1914. (New York: 105 East 22d St. 1915. Pp. 231.)

The associated out-patient clinic of the city of New York. Second annual report, 1914. (New York: 17 West 43d St. 1915. Pp. 74.)

The committee of fourteen in New York City. Annual report for 1914. (New York: 27 East 22d St. 1915. Pp. 55.)

An account of progress made in suppressing vice.

Development and present status of city planning in New York City. (New York: Board of Estimate and Apportionment. 1914. Pp. 76.)

Insane and feeble-minded in institutions, 1910. (Washington: Bureau of the Census. 1914. Pp. 217.)

The public schools and women in office service. Studies in economic relations of women. (Boston: Women's Educational and Industrial Union. 1914. Pp. xv, 187. 80c.)

This is part of a survey instituted by the director of Boston's vocational schools and designed "to present the business, economic and social conditions which confront the public commercial high schools." The Boston Chamber of Commerce studied these conditions as affecting boys, and the Massachusetts Board of Education examined the business careers of former pupils. The Union's report discusses public commercial schools, office work as an occupation for women, the wages of women office workers, and the homes and neighborhoods of a group of such employees. All investigations were made in Boston and the vicinity. Office service employs a varied class of labor, varying from unskilled clerks to responsible secretaries. The whole occupation, compared with manufacture and salesmanship, affords excellent conditions for women workers. Education and experience react directly on wages and advancement.

The study has led to significant conclusions concerning the vocational training desirable. Changes in office equipment and administration demand constant readjustments and require the educator to keep in close touch with the employer, whose needs he must translate into educational requirements. Training for specific processes and machines is wholly inadequate. "A well-balanced education must lay the foundation for success" (p. 149). The school should place its pupils in the type of office and branch of work to which they are suited, and to do this efficiently must know the pupil's background and capacity as well as the employer's demands on her personality and training. Such placement, followed by observation and record of the pupil's experience, is a proper part of the service of vocational schools, and affords information which should continually react on its work. Part-time schooling is desirable. Well conducted, it utilizes the pupil's school courses, facilitates the placement work, and develops valuable coöperation between educator and employer.

EMILIE LOUISE WELLS.

Report to the governor and legislature of the New Hampshire children's commission. (Concord, N. H. 1915. Pp. 136.)

Second annual report of the social welfare department of the city and county of Denver, Colorado, for the year ending December 31, 1914. (J. M. Perkins, commissioner. 1915. Pp. 134.)

Insurance and Pensions

The Metropolitan Life Insurance Company. (New York: The Metropolitan Life Insurance Company. 1914. Pp. x, 195.)

The material contained in this volume is largely descriptive, and naturally falls into two main parts. The first is devoted mainly to a consideration of the foundation and early history of the company, its phenomenal growth, its present financial position, the historic site of the sumptuous home-office building, the building itself, and the organization of the home-office staff. The second half of the volume is given over to an account of the nature of the professional and welfare work carried on by the company. With reference to professional work, it may be said in passing that an account is given of such matters as premium rates, policy forms, plans of protection, child insurance, the functions of the ordinary, intermediate and industrial departments, health insurance, etc. But the part of the book which is not only the most important but also of the greatest general interest is that which contains a description of the welfare work, in behalf of the conservation of human life and efficiency, which the company, apart from its legal obligations, performs for the benefit of its employees and policyholders.

The welfare work performed for employees is varied and extensive. The benefits extended to the home-office staff, outside of salaries paid, includes—free life insurance for an amount equal to one year's salary; health insurance, for which the company pays one half the premium; staff savings fund; free luncheon service; free medical service in a clinic at the home office; free vaccination; a dental bureau; a nursing service for clerks when sick at home; a tuberculosis sanatorium; a correspondence school; a recreation hall; a gymnasium; instruction in English, stenography and type-writing; a sewing room with an instructor; and a library.

The welfare work in behalf of the over 13,000,000 industrial policyholders is primarily educational. The viewpoint of the company is that the industrial policyholders, "in many instances, have but little opportunity to come into contact with modern educational movements for the preservation of health and the conservation of life. The company has, therefore, felt that in dealing with these members of the industrial classes it has an obligation beyond that contained in the policy contract. The extensive welfare programme of the company is a direct outcome of this conception." For the accomplishment of their aims, representatives of the company visit the homes of the insured weekly, leaving attractive pamphlets and other literature on health and hygiene. Strenuous efforts are made to educate policyholders regarding the causes and means of preventing numerous diseases, especially tuberculosis. In 1909, a visiting nurse service was organized for the purpose of sending nurses into the homes of sick industrial policyholders. Moreover, the company coöperates with various public and private social and health agencies with a view to promoting the general welfare of the people served. A list of the more important publications of the officers and employees of the company, covering social work, public health, and the professional aspects of the whole field of insurance, occupies several pages toward the close of the volume.

The work is handsomely and liberally illustrated. It is a sumptuous de luxe edition issued primarily for the benefit of the company's field force, its home-office employees, and its policyholders. In view, however, of the commanding position of the Metropolitan in the insurance world, the volume should prove of interest to those who are engaged in the business of insurance, as well as to serious students of the subject. Moreover, the account of the welfare activities should appeal to the ever increasing number of

American men and women who are contributing time and money in behalf of the great work of conserving human life and health.

AVARD LONGLEY BISHOP,

Sheffield Scientific School of Yale University.

NEW BOOKS

- BURN, J. and BROWN, E. H. *Elements of finite differences, also solutions to questions. Set for part I of the examinations of the Institute of Actuaries.* Second edition enlarged and revised. (London: Layton. 1915. 10s. 6d.)
- MUDGETT, B. D. *The total disability provision in American life insurance contracts. Supplement to Annals.* (Philadelphia: American Academy of Political and Social Science. 1915. Pp. 83. 75c.)
- Decisions of the Ohio Industrial Commission, with references to negligence and compensation cases annotated.* (Chicago: Callaghan. 1915. Pp. 1171-1224.)
- Intercollegiate debates and bibliographies on old age insurance and banking and currency reform.* (Austin, Tex.: The University. 1915. Pp. 54.)
- Illinois workmen's compensation act and decisions of the industrial board with reference to negligence and compensation cases.* (Chicago: Callaghan. Pp. 1171-1221.)
- Report on old age relief.* (Madison, Wis.: Industrial Commission. 1915. Pp. 76.)
- The retirement system for employees of the commonwealth.* (Boston, Mass.: Board of Retirement. 1914. Pp. 23.)
- Workmen's compensation laws, March, 1915: Indiana, Montana, and Wyoming.* (New York: Peck & Durham. 1915. Pp. 32, 48, 24. 25c. each.)
- Workmen's compensation law of the state of Oklahoma.* (New York: Roy Press. 1915. Pp. 36. 25c.)

Socialism and Co-operative Enterprises

NEW BOOKS

- HUNTER, R. *Labor in politics.* (Chicago: The Socialist Party. 1915. Pp. 202. 25c.)
To be reviewed.
- LANDON, W. C. *Co-operation; history, necessity, methods.* (Salina, Kan.: Central Kansas Pub. Co. 1915. Pp. 48. 25c.)
- MARSTON, G. *Facts on municipal ownership in 268 towns and cities.* (Chicago: Public Service Pub. Co. 1915. Pp. 32. 25c.)
- WALLING, W. E. *The socialists and the war.* (New York: Holt. 1915. Pp. xii, 512.)
To be reviewed.

Statistics and Its Methods

Economic Cycles: Their Law and Cause. By HENRY LUDWELL MOORE. (New York: The Macmillan Company. 1914. Pp. viii, 149. \$2.00.)

Economic Cycles: Their Law and Cause is a carefully worked out and well-written study of the statistics of rainfall, crop yields per acre and total production, iron production, and general prices, developed by the mathematical methods of curve-fitting and correlation. The conclusion of the author is this:

The weather conditions represented by the rainfall in the central part of the United States, and probably in other continental areas, pass through cycles of approximately thirty-three and eight years in duration, causing like cycles in the yield per acre of the crops; these cycles of crops constitute the natural, material current which drags upon its surface the lagging, rhythmically changing values and prices with which the economist is more immediately concerned (p. 149).

This conclusion is, apparently, not in harmony with the conclusions of recent writers on business cycles as to the role played by crops in causing prosperity and depression. Veblen, for instance, says in *The Theory of Business Enterprise* that "the true, or what may be called the normal, crises, depressions, and exaltations in the business world are not the result of accidents, such as the failure of a crop. They come in the regular course of business" (p. 183). Mitchell holds that good or bad crops are the most important of numerous "extraneous factors" that cause "divergences among business cycles" which are business phenomena caused by variations in profits.¹

In Professor Moore's statistical methods and reasoning the reviewer finds no important defect. The author finds cycles of thirty-three and eight years in rainfall and crops. The method of attaining this result is in accord with recognized mathematical processes which allow the data, rather than the pre-conceived notions of the investigator to mould the conclusion. Given the cycles in crops and rainfall, the remainder of the argument depends upon the high degree of correlation found (by means of Pearson's coefficient of correlation) among various statistical series beginning with annual rainfall and yields per acre of important crops and ending with pig-iron production and general prices, the last-named series being taken as business barometers. In the opinion of the

¹ *Business Cycles*, pp. 582, 239.

reviewer the high correlation found (r being upwards of 0.60 in most cases) warrants Professor Moore's conclusions. Outside considerations and the sequence of fluctuations rather than the coefficient itself, of course constitute the reasons for specifying rainfall as cause, and crop yields, iron production, and general prices as effects.

The argument runs as follows:

1. The rainfall data of the Ohio Valley for the period 1839-1910 is well described by a multiple sine function (five terms of Fourier's series) showing cycles of thirty-three and eight years and their semi-harmonics.

2. The curve thus found fits the rainfall data of Illinois for the period 1870-1910. The coefficient of correlation (r) for the two series of annual rainfall is 0.60.

3. The yields per acre (secular trend eliminated) of corn, oats, hay, and potatoes in Illinois constituting 96 per cent of the crop value in 1912, are highly correlated with the rainfall of the "critical period" of the crop in question. The coefficients are, respectively, 0.589, 0.290, 0.620, and 0.666.

4. The combined crop indices fluctuate with the mean effective rainfall of the critical periods, $r = 0.584$.

5. The percentage price changes from year to year of the four representative crops vary inversely with the percentage changes in yields per acre, the coefficients being, respectively, -0.815, -0.656, -0.718, and -0.873.

6. The fluctuations in the yield per acre of the four representative crops in the United States correspond to the fluctuations in Illinois, the coefficients for corresponding annual differences ranging from 0.745 to 0.855. Likewise, the yield of the four crops in the United States is representative of the yield of nine crops, including all the leading cereals, hay, potatoes, and cotton—indices for the groups of four and nine crops giving a coefficient of 0.960.

7. The cycles of yield per acre of nine crops precede similar cycles in pig-iron production by two years. The coefficients obtained by pairing yield indices with iron production of the same year and lags of one, two, three, and four years are, respectively, 0.625, 0.719, 0.718, 0.697, and 0.572.

8. The cycles of yield per acre of nine crops precede similar cycles in general prices (Aldrich and Labor Bureau indices) by four years. The coefficients obtained by pairing yield indices with

general prices three, four, and five years later are, respectively, 0.786, 0.800, and 0.710. This completes the chain of reasoning summarized by Professor Moore in the quotation made at the beginning of this review.

The author's conclusions are an extension and application of those of Mr. R. H. Hooper² and Professor J. Warren Smith, sectional director of the United States Weather Bureau. However, he refers to neither of the writers named. Professor Smith stated in the 1903 *Year Book of the Department of Agriculture*: "If one knows the precipitation during the month of July over the great corn-producing district he can estimate the yield of the season very closely." Professor Smith based this statement upon a study covering the eight leading corn states for the period 1888-1902; average yield per acre was compared graphically with the average precipitation in June, July, and August. In the *Monthly Weather Bulletin* for February, 1914, he continued the study, this time using the Pearsonian coefficient. He found that for eight corn states during the period 1888-1912 the yield of corn per acre and the rainfall in July gave a coefficient of 0.78.

Professor Moore has found the demand curves for each of the four representative crops and for pig-iron. The demand curves of the crops slope downward toward the right indicating that "the amount demanded increases with a fall in price and diminishes with a rise in price." In contrast to agricultural products, the demand curve for pig-iron slopes upward toward the right. The reviewer has found results that confirm those of Professor Moore.³

The series of indices of crop-yield, pig-iron production, and general prices, used by the author in getting the correlation coefficients quoted in 7 and 8 above are not annual figures but three-year averages, *e.g.*, the crop yield for 1895 is the average for 1894-5-6. *Cumulative* effects are thus measured. The reviewer has found that *annual* yields correlated with *annual* general prices four years later give a coefficient of 0.599, a lower coefficient than the one obtained by using three year averages, and that four-year average yields correlated with Moore's three-year average general prices with a lag of three and a half years give a coefficient of

² See "Correlation of the Weather and the Crops," *Journal of the Royal Statistical Society*, vol. 70 (1907), p. 1.

³ See *Quarterly Publications of the American Statistical Association*, vol. XII (Dec., 1910), p. 314.

0.842, a higher coefficient than the one obtained by Moore, using three-years averages in both cases.

It seems to the reviewer that Professor Moore's "law of economic cycles" is not conflicting with that of Professor Mitchell. The latter gives an excellent account of what takes place in the business world during the four years of prosperity following bumper crops and the four years of depression following scant crops. Moore tells why the chain of events starts; Mitchell describes the sequence of events resulting.

WARREN M. PERSONS,

Colorado College.

Statistical Atlas of the United States. Prepared under the supervision of CHARLES S. SLOANE, Geographer of the Census. (Washington: Department of Commerce. Bureau of the Census. 1914. Pp. 90; plates, 503.)

This volume is the fourth in the series of statistical atlases published by the Bureau of the Census. To Francis A. Walker credit is due for the first use of the graphic method in census volumes. Colored maps were employed in the preparation of certain of the ninth census reports in 1871, and appear to have made a favorable impression at once. The Secretary of the Interior, in making his annual report for the following year, urged the compilation of a statistical atlas. Congress immediately voted the necessary appropriation and a large folio volume was issued in 1874.¹

Though graphic illustration was greatly extended in the census of 1880, no atlas was published. In considerable measure the succession was kept intact, however, by the volume prepared under Mr. Henry Gannett's direction and published by Charles Scribner's Sons, *Scribner's Statistical Atlas* (New York, 1883). In connection with the eleventh census the government returned to the task and issued its second atlas, in large folio size like the first. Mr. Gannett, as Geographer of the Census, had charge of the preparation of the volume, as also of the atlas of 1903, which was thrown into the much more convenient quarto form. This last issue continues the quarto form, but it reflects many of the changes that have marked the organization and work of the Bureau of the Census during the past ten years. The atlas of the twelfth census

¹This first statistical atlas was published in a limited edition and is not commonly available.

followed the general plan of the decennial enumeration of 1890 and was divided into four parts, dealing with population, vital statistics, agriculture, and manufactures. The recently published volume contains sections upon mines and quarries, cotton, financial statistics of cities, religious bodies, marriage and divorce, and insane in hospitals. Thus material has been drawn from the special inquiries of the bureau as well as from the decennial enumeration. The abandonment of federal vital statistics is indicated by the reduction of the part on vital statistics to one page of text and three plates; in 1903, the same subject was allotted 16 pages and 25 plates. Population, agriculture, and manufactures receive about the same treatment in both volumes, though the number of plates dealing with population has been considerably increased in the 1914 atlas, and the number upon the other two subjects somewhat reduced.

The rule of economy to which the Bureau of the Census has been recently subjected is manifest in the atlas: color work has been almost entirely eliminated from its pages. The series of colored maps, made familiar by earlier publications, in which the distribution of population in the United States is shown for the several census years, is retained and brought to date; otherwise the plates are practically all done in black and white. The change undoubtedly reduces somewhat the attractiveness of the volume. Nevertheless, the black and white work is clearly satisfactory, is much less expensive, and permits the wider use of the cuts in the text of other census publications.

In technical execution, there is little to be desired. The figures are uniformly well done and are printed upon a paper which gives a clearly defined outline. The choice of graphic forms for presenting the varied data is, in most cases, excellent. Maps occupy most of the plates, and properly so, since it is in the presentation of geographic variations that the graphic method possesses the greatest advantage over ordinary text. The dot and circle maps used in presenting the subject of agriculture are new to the atlases and decidedly pleasing. Among the geometric figures, the simple solid and shaded bars are most extensively used. The form is a satisfactory one and might well displace the divided circles which are used on more than a dozen of the plates. The age and sex pyramid which has figured so largely in some of the earlier atlases almost entirely disappears. Orthodox frequency curves are intro-

duced on three plates; it is to be hoped that they will find a wider use in atlases of the future. All in all, from the point of view of the graphic method, the volume is a highly commendable piece of work, distinctly creditable to the Geographer of the Census, Mr. Charles S. Sloane.

The principal question raised by the statistical atlas is the fundamental one of the need for such a volume. As it stands today the atlas is practically a reprint of maps and diagrams previously employed to illustrate other publications of the Bureau of the Census. The question may fairly be put: Is the policy of segregation a wise one? Presumably these maps and diagrams have had and will continue to have their most effective use in connection with the tables and text with which they were originally published. To place them in a separate volume with the barest textual comment seems unduly to burden the graphic method of presenting facts. Frequently charts and maps greatly strengthen the textual exposition of a subject; they seldom serve as a complete substitute for editorial analysis.

It is to be noted that the first statistical atlas, compiled under Francis A. Walker's direction, was not open to this criticism. The volume contains substantial discussion contributed by several of the most eminent authorities in the country. It drew materials from several sources outside the Bureau of the Census. The result was a book, full of interest, combining effectively a systematic body of facts not otherwise readily available. *Scribner's Statistical Atlas* of 1883 presented a still more comprehensive range of subjects. It drew from a large number of sources, official and unofficial. Though inferior to the census atlases in arrangement and workmanship, the volume catered to a real need.

It would be interesting to know how wide and strong a demand is met by this later work. Possibly the need justifies the cost even in these days when already collected census materials have not been tabulated and published because of the poverty of the service. But it is obvious that a return to the conception underlying the atlas of 1874, while it would impose added burdens upon those responsible for the preparation of the volume, would yield an atlas for which there would be a clearer and more widespread need.

EDMUND E. DAY.

Harvard University.

NEW BOOKS

BINET, A. and SIMON, T. *A method of measuring the development of the intelligence of young children.* Authorized translation by C. H. TOWN. Third edition. (Chicago: Chicago Medical Bk. Co. 1915. Pp. 82. \$1.)

BOWLEY, A. L. *The nature and purpose of the measurement of social phenomena.* (London: King. 1915. 3s. 6d.) Pp. viii, 241.
To be reviewed.

HORSBURGH, E. M. *Modern instruments and methods of calculation; a handbook of the Napier tercentenary exhibition.* (London: Bell. 1914. 6s.)

NEARING, S. *Income; an examination of the returns for services rendered and from property owned in the United States.* (New York: Macmillan. 1915. Pp. 17, 238. \$1.25.)
To be reviewed.

Bayern's Entwicklung nach den Ergebnissen der amtlichen Statistik seit 1840. (Munich: Lindauer. 1915. Pp. x, 145. 2 M.)

Ehe, Geburt und Tod in der schweizerischen Bevölkerung, während der zehn Jahre 1891-1900. Vol. 4. *Die Sterbefälle.* (Bern: A. Francke. 1914.)

Graphisch-statistischer Atlas der Schweiz. (Bern: A. Francke. 1914.)

DOCUMENTS, REPORTS, AND LEGISLATION

Industries and Commerce

FACTORS IN THE MARKETING OF FARM PRODUCTS. The agricultural colleges and experiment stations of the United States, and the departments of agriculture both state and national, have been working on the basis that "supply and demand" is the one determining factor in shaping prices. If it is just a technological question of costs as affecting the supply and a hedonistic question as explaining variations in demand, naturally the entire consideration should be given to developing efficient methods of production. The emphasis will be on decreasing expenses in order to increase profits. Competition will be merely a rivalry of industrial methods of production, in which the fittest will survive.

The position of these institutions has been in accord with the best economic tradition. All economists, as well as legislators and judges, have advocated free competition as the best means to help the fittest survive. Fitness has not been conceived to be that of an organization but that of the individual entrepreneur. Organization from the time of Adam Smith to the present has been thought to be an obstructor of free competition. According to the traditional view the proper competition is a competition between individuals. That railroads and steamboats would necessitate the development of a different plan for the distribution of goods to a world market was not, of course, thought of when economic theory first took form. According to this individualistic concept of business, efficiency is not to be achieved through a system of organization but by the individual business man producing independently and selling cheaper than his competitors.

Gradually, however, different lines of business have found that individualistic competition is too costly. More factories have been built than can be run profitably. With so many engaged in the business of distributing, its cost has become too great. The New York Food Commission, in its report, recommended more organization among producers and consumers to reduce the cost of distributing farm products. Organization alone makes possible systematic distribution. Free competition means chaos in the marketing of a product. Seventy-five per cent of the manufacturers in the United States have formed corporations. The laboring population is finding it necessary to organize in order to deal satisfactorily with organized capital. The European farmers have organized; and now at last the American farmers are organizing. Many associations in grain, fruit, truck,

butter, and other lines have been formed. In Minnesota alone there are 2103 farmers' corporations doing a business of \$60,760,000 annually.

Under what conditions is organization desirable in the marketing of farm products? A good local market presents a situation which is very old with us: farmers can huckster products without organization. But most farm products have to seek a distant market, and so must either be sold to a local merchant or traveling buyer or must be shipped to a distant commission merchant.

The local merchant is not a packer and shipper by training. Sale of the farmer's products is only an incident in his business of retailing goods to consumers. The stuff he buys is generally the by-products of the farm. It comes in ungraded, without standard or brand, and has to be sold at a low price. Local merchants in 67 North Carolina towns report buying butter at an average price of 15 to 19 cents a pound for the year 1914; in 48 towns, at 20 to 24 cents a pound; and in 22 towns, at 30 cents or more. Fifty-eight towns in 29 counties report paying the farmers on an average 15 to 19 cents a dozen for eggs during 1914; and 69 towns in 41 counties report 20 to 25 cents a dozen. The Catawba Creamery Company, of Hickory, North Carolina, was able to pay its patrons 30 cents a pound for butter fat on an average for the year 1912, and 30 to 31 cents during 1913 and 1914. Before the organization was formed the farmers sold their butter to local merchants for from 15 to 25 cents a pound.

Shipment of products to commission merchants is like hiring a man with the expectation of not bossing him. A commission merchant acts without any possibility of oversight by the individual farmer. Through organization, farmers may safely trust their products to such agents. If a commission house does not act fairly, an organization may blacklist it. A commission merchant can not afford to risk the withdrawal of the patronage of an organization with a large volume of business. The Southern Produce Company of Virginia, doing a business of \$8,000,000 a year, is thus able to insure fair dealing for its members.

In the present scheme of business, production in isolation does not pay. The low prices received for butter and eggs by the unorganized farmers in western North Carolina show up this method of production. A large volume of business reduces operating expense whether the farmers of a section are organized or not. A small business can not afford to have its own telegraphic service, or its own representatives to watch markets and drum up trade. The Eastern Shore of Virginia Produce Exchange pays out \$20,000 a year for telegraphic expenses alone. The California Fruit Growers Exchange has salaried agents

in all the leading towns of the United States and Canada to watch markets and solicit trade. Knowledge of markets becomes an important factor. If the farmer has business agents in several towns, upon whom he may rely to keep him informed as to prices and possible sales, he is not dependent upon one market. Dependence upon one market, upon such traveling buyer or a local merchant, results in low prices, for such person or market occupies the position of a monopolist. Or, several buyers may combine and act as one. The only safeguard is in provision to sell in more than one market. The expense of this is generally too great for the isolated farmer.

The production of standardized goods is a prime requisite to sale in distant markets. The manufacturer standardizes his products and so has no trouble in selling, on the basis of a trademark, to distant buyers. No matter how good the quality of the butter may be, a local merchant will not generally be able to sell, at the top of the market, the output of one small producer, for the reason that there is too little of it to spread abroad a reputation. Iowa butter sells in North Carolina because there is enough volume back of the brand to give it the momentum to reach this state. Disorganization among the potato growers of North Carolina increases the number of middlemen required and consequently the expense of distributing this product. Chicago produce dealers can not buy directly from the producer, for they can not rely upon the quality of the product nor upon getting it when they want it. So they buy North Carolina sweets through Norfolk or Baltimore dealers; and the latter buy their supply from local North Carolina solicitors.

An organization can learn the demands of a market and the requirements for shipping, can reduce these demands to rules, and enforce the rules upon its members. The Eastern Shore of Virginia Produce Exchange finds it necessary to pay \$30,000 a year for the purpose of insuring proper grading on the part of farmers. This means a cost of about 1 per cent on gross sales for the expense of maintaining a systematic inspection of grades. As a result, they have a brand of potatoes, the Red Star brand, which is known from the Atlantic to the Pacific. On the basis of known grades the organization can sell 95 per cent of its potatoes *f. o. b.* loading point by wire to jobbers in the leading markets of the United States. In 15 counties of North Carolina 2500 farmers report that the buyers determine their grades for them. Thus the better grades frequently receive no recognition. A carload of mixed grades is harder to sell and is liable to bring the price of the lower grades. In the same way cotton farmers who have

no knowledge of grades can not sell by wire or letter to mills. Sales have to be made to traveling buyers or to local merchants who can sample the cotton before buying. A stock-raiser is not in a position to ship his own products unless he raises a standard breed. Only an organization of stock-raisers would be able to spread abroad a reputation for a grade of a particular breed of hogs or cattle. In some lines, the middlemen's organizations are helping the farmers to organize, as in the case of the potato growers of Wisconsin and of the vegetable growers of California. This is the only way a large distributing corporation can secure a standardized product and its delivery in the amount and at the time desired.

Through organization, better transportation can be secured. Without favorable freight rates Greensboro would not be one of North Carolina's main distributing points for cotton. That town has the storage-in-transit privilege, by which the cotton can be shipped into the town, stored, and then shipped out at a balance of the through rate from the point of origin. Without favorable conditions of transportation the California Fruit Growers Exchange could not distribute its own fruit throughout the United States. The "postage stamp rate" or flat rate for all eastern points in the United States and Canada gives this association power to start cars and to stop them at cities like Kansas City, Omaha, or Minneapolis, if prices are good, and if not, to keep them going until a good market is reached. Thus an organization is not forced to sell in any particular city. Resales by middlemen from glutted markets are prevented.

Farmers organize to pool their sales or purchases. The aim is profits to members as producers and not as stockholders. If the organization makes the profits, it becomes an inducement for a few to control it for their own benefit. Thus an association of farmers may finally become a corporation of middlemen to exploit the producer. To prevent this and to insure that the organization shall continue for the benefit of all the members it is necessary to make a legal provision for the incorporation, maintenance, and supervision of a coöperative form of organization. The corporation law of ordinary business does not encourage the development of organization in agriculture. The coöperative association should be allowed by special statute to restrict the powers which now prevail under corporation law by limiting the dividends to an interest charge, by limiting stock transfer to those eligible to membership, amount of stock which can be owned, and the voting power to one vote to each member. If profits over and above a necessary interest are prorated to the producer according to the

amount of products handled for him, the organization may be said to be doing business for its members at cost. Another practice for securing the same result is to have a fixed brokerage charge to cover expenses and to pay to members any surplus above expenses which may remain after the year's business is done; or any uncovered expenses may be prorated to members according to the amount of business transacted. The form of organization is so important, to insure the permanence of any association of farmers, that it may be said to be a factor in the marketing of farm products.

WILLIAM R. CAMP,

Agricultural Experiment Station, North Carolina.

OFFICE OF DIRECTOR OF MARKETS CREATED IN IDAHO. The legislature of the state of Idaho at its last session, 1915, created the office of director of farm markets, carrying a salary of \$2500 per year, and filled by appointment made by the governor, the appointee holding office for two years.

The creation of this department is an important step in the effort on the part of the state to solve the difficult problem of marketing farm crops. In this particular case, however, the scope of the work outlined for the director of markets is so wide that little of definite value can be expected that will shed light on the main problem, that of marketing farm crops.

The duties of the director are "to promote, in the interest of the public, economical and efficient production and distribution of all farm commodities."¹ He is authorized to establish a market news service which is to include information regarding crops, freight rates, and commission rates. His office is to act also as a clearing house for information between producers and consumers. It is his duty to cooperate with both the producers and consumers, to devise economical and efficient systems of distribution by a reduction of waste and expense incident to marketing, and to investigate the methods of all those who act in the capacity of middlemen handling farm products in order to accomplish distribution without hardship, waste, or fraud. He is expected to improve country life, and, so far as is in his power, to provide equality of opportunity for all farmers of Idaho. To these duties are added those of an immigration officer, as, for example, to determine what conditions make for success and what for failure of the home-seeker and to use all means in his power to remedy conditions which lead to failure. It is his duty to detect fraud practiced by

¹ Bill Creating the Office of Director of Markets.

unscrupulous land agents upon home-seekers, in the sale or transfer of real estate, and, if found, to see that the wrongdoer is prosecuted. He must scrutinize all advertisements pertaining to colonization, and warn all home-seekers against inaccurate or misleading statements. His office is to be a labor agency for farm labor and he is authorized to act as a land agent listing farm property for sale, for which service he is to charge a fee of one dollar for entry and a commission of one per cent in case of sale.

Much as all these phases of agriculture need attention, it should be evident to any one who considers the matter seriously that one official can not attend to duties so varied as those enumerated and do justice to them. The predicament of the legislature is quite clear. In their endeavor to solve the problem of marketing farm products these various related problems appeared and one thing led to the other. The gravity of the market problem in the Northwest can be attributed in no small degree to the real estate booms, when, on account of misleading and inaccurate statements, many were induced to pay prices which are far beyond the productivity of the land. Especially was this true of the irrigated lands. The stimulation of agricultural immigration only aggravated the problem since it increased the supply of farm products to a greater degree than it did the demand.

A. W. TAYLOR.

Washington State College.

WATER TERMINALS AND WATER COMPETITION. The business of transporting passengers and freight by water is generally assumed to be competitive and, until recently, not properly subject to any special supervision or control. Transportation by rail is now subject to careful supervision by a national commission and several state commissions. Aside from the greater magnitude of railway transportation it is doubtful if the need of large regulative powers on the part of the government is any more urgent in the case of rail carriers than in that of water carriers. The nature of the competitive methods employed by rival carriers is one reason why some regulative measures are necessary. Rates for transporting passengers and freight by water are fixed by competition to a greater degree than rail rates. As in the case of rail transportation, however, unregulated competition almost inevitably takes a form calculated to destroy itself—one company or combination of companies securing in the region served a virtual monopoly of trade.

The key to an adequate control of navigation companies is the water

terminal. Proper wharfage facilities and the right to make arrangements with other carriers with reference to the transshipment of passengers and freight at the terminal points are essentials to the successful operation of a water carrier. Hence, efforts to limit or throttle competition at shipping ports generally take two forms which may be described as follows:

1. *Discrimination at terminals or at points of transshipment with reference to the use of wharfage facilities.* This discrimination is shown in the ownership or control of the well-situated docks and wharves and the refusal to allow these facilities to be used at reasonable cost by independent carriers. Private interests control the greater part of the active water frontage at our leading ports; and these interests are often those whose operations are opposed to any general development of water traffic. Public control, in any considerable measure, exists only at New Orleans, San Francisco, Baltimore, and New York; and in the last of these places this control is almost nullified by exclusive private leases for long terms. "Two ports only, New Orleans and San Francisco, are noteworthy for their high degree of public ownership, control, efficiency and equipment."¹ The government makes enormous expenditures in dredging rivers and harbors to promote navigation, only to have its action neutralized by the lack of proper supervision, on the part of local governments, over terminals.

2. *The refusal to grant through routing privileges.* This refusal is generally a discrimination against certain carriers at transshipment points on the part of connecting railroads or steamship lines. Through bills of lading issued by favored carriers are honored, while those of others are refused recognition. Where through bills of lading are accepted, prorating arrangements are usually entered into between the connecting carriers. This accentuates the discrimination against the independent line which is refused recognition, and forces the latter to carry through freight at higher rates than those of the favored competitor. Lines denied through routing privileges are refused membership in traffic associations composed in part of connecting carriers. This exclusion means an additional burden in the matter of publishing rates.

At most of the leading ports of the country, railroads or large shipping combinations own the wharves or control them under long-term leases.² The public character of a wharf used in the shipment or landing of freight by a common carrier is not adequately recognized

¹ *Report of Commissioner of Corporations on Transportation by Water in the United States*, pt. III, *Letter of Submittal*.

² *Ibid.*, pt. III.

outside of a comparatively few municipalities. Treated as private property, with all the privileges incident thereto, one or a few carriers may determine what traffic shall come to a port and what shall not, and whether it shall come by rail or by water.³ Instances are not wanting where docks and wharves have been occupied apparently for no other purpose than to prevent their use by others.⁴

There are, however, some signs of a changed attitude toward the character of terminal facilities irrespective of their private ownership. A few years ago the question of the public use of docks owned by railroads engaged in interstate commerce was considered before the Interstate Commerce Commission in the Mobile Dock case. Another matter involved in the case was the issuing of through bills of lading. At Mobile, the Mobile Liners, an agency for the Leland-Harrison Line, alone enjoyed through bills of lading on European business. The Mobile and Ohio Railroad and the Southern Railway attempted to control the cotton movement for this line, with which they had an exclusive contract. On the railroads' refusal to recede from their position, the Mobile Chamber of Commerce made complaint to the Interstate Commerce Commission, and hearings were held in Mobile. A part of the complaint related to the case of the United States Shipping Company, which had arranged with the Mobile and Ohio Railroad to handle part of its business to Colon. This railroad gave permission to land at its wharves and issued through bills of lading for one or two trips. Suddenly the railroad declared it could no longer accommodate the United States Shipping Co. The latter was not allowed to land its ships at the railroad wharf or make ship-side deliveries.

On May 7, 1912, the Interstate Commerce Commission entered an order as follows:

1. Where a railroad has a wharf to which its tariffs offer delivery and at which part of the shipping public is served, such a wharf becomes a public terminal, and if all shippers are not given access to it by the boats they choose to employ, it then becomes the carrier's duty to make delivery at other available docks at the same rates.
2. A railroad has a right to reserve wharves for its own use and for the use of such water carriers as it prefers, provided it affords to the public access to equal facilities elsewhere at equal rates.

³Some examples of this practice appear in *Hearings before Committee on Inter-oceanic Canals* (62 Cong.), pp. 151, 161, and 162, and *Hearings before Committee on Merchant Marine and Fisheries* (62 Cong.), pp. 982 and 983.

⁴Testimony of B. N. Baker in *Hearings before Committee on Merchant Marine and Fisheries*, p. 1300.

3. Where a rail carrier making a rate to a port institutes a practice of authorizing its agents to issue bills of lading for water lines, it must extend such practice to all water lines under reasonable regulations.³

According to this case, a wharf owned by a railroad engaged in interstate trade and used by part of the shipping public becomes a public terminal. Wharves may be reserved for its own use or the use of such carriers as it prefers, but equal facilities at equal rates must be furnished elsewhere. It is to be observed, however, that this decision applies only to wharves owned or controlled by railroads.

The refusal to allow through routing arrangements to certain lines is another form of terminal discrimination: that is, discrimination against some water carriers in favor of others, or against water carriers in general in favor of rail carriers. Through routing arrangements imply the right to use through bills of lading and the right to prorate. The two, though distinct, generally go together. Where a through bill of lading is refused, the initial carrier must issue a supplementary bill of lading, forward the charges on freight, and meet transfer expenses which are generally absorbed in through routing. Where the right to prorate does not exist, a rate over the routes of two or more connecting carriers is the sum of the local rates, to which transfer charges are usually added. Where it does exist the through rate is usually much less than this. It is needless to say that where through routing or prorating arrangements are denied one company and allowed another, the effect is destructive to the business of the carrier discriminated against except on local traffic.

This discrimination is more serious when the connecting carrier is a railroad than when it is another water line. A steamship company generally transports commodities, produced in certain areas and carried by railroads, to the port of shipment to be further transported to another port for final delivery to various inland points connected by rail. A water line refused through-routing privileges must not only name the local rates by rail and water, but add heavy charges for transshipment. Where a railroad competes with a water carrier, it is frequently enabled by virtue of its strategic position to divert to rail routes traffic which would ordinarily go by water.

The refusal to prorate on the part of the railroads and large shipping companies is very common in all parts of the United States. The effect of this refusal is nowhere better illustrated than on the traffic passing through the Erie Canal. At the present time the only through steam-

³ Complaint No. 4242, *Mobile Chamber of Commerce et al. v. Mobile and Ohio Railroad Co. et al.*, Interstate Commerce Commission.

ship line on the Great Lakes which reaches Buffalo and has canal connections independent of railroad control is the Pacific Despatch.⁶ It is available to independent forwarders, but its facilities are limited as it has but one boat. The only other outlet from Buffalo for canal freight carried by independents and bound to upper lake ports is shipment by rail or by railway-controlled lake lines. The canal rate to Buffalo plus the rail or local lake rate plus the charges for transshipment at Buffalo makes the through rate so high compared with the through rates over the railway routes that independent forwarding agencies have virtually no chance to do more than local business. An independent canal forwarder, in talking with the writer some years ago, characterized the refusal of the railroads and railroad-controlled lake lines to prorate with independent forwarders as practically putting a Chinese Wall around the Erie Canal.

The state of New York has recently been making extensive improvements at enormous expense for the purpose of increasing the efficiency of the canal. In view of the attitude of the trunk-line railroads toward canal traffic, the Interstate Commerce Commission has recently ordered these roads to dispose of their holdings in the lake steamship companies.⁷ How far this order will go toward improving the position of the independent canal forwarders remains to be seen. A step in the right direction, it seems to the writer, was taken some time ago in a decision by the commission materially extending the rights of independent lines to prorating privileges. The Flour City Line,⁷ operating between Duluth and Buffalo, published a proportional of 6.3 cents per 100 pounds on flour, or 1.7 cents less than the railroad-owned boat lines. The railroads west of Duluth published a proportional of 5 cents from Minneapolis to Duluth, or a reduction of 0.8 cents, and issued through bills of lading to New York via the Flour City Line. The railroads east of Buffalo declined to establish this through route or to recognize the through bills of lading. They accepted the traffic at Buffalo only

⁶ *Report of Commissioner of Corporations on Transportation by Water*, pt. IV, p. 59.

It may be mentioned in this connection that the Detroit and Cleveland Navigation Co. and the Cleveland and Buffalo Transit Co. are also independent concerns. Their operations, however, are confined mainly to Lake Erie and the Detroit River, and hence are not through lines. It should also be understood that the term "line" is applicable to public carriers having regular sailings. Ore steamers, lumber vessels, etc. are not public carriers in this sense and their sailings are not regular.

⁷ I. C. C. No. 4495, *Flour City Steamship Co. et al. v. Lehigh Valley R. R. Co. et al.*

upon the local bills of lading at the local rate of 11 cents instead of 9.2 cents proportional given on through bills of lading via their own boats. They also declined to absorb the handling charges. The Interstate Commerce Commission was asked to establish a through route and a joint rate of 20.5 cents, there being already an established through route and a joint rate of 23 cents between Minneapolis and New York.

The Interstate Commerce Commission held that the publication of proportional rates by the western carriers and by the Flour City Line covering a through movement from Minneapolis to Buffalo when for beyond, the actual movement of traffic upon through bills of lading from Minneapolis at least to Buffalo, and the prepayment of freight charges, in some instances through to New York and in others to Buffalo necessitating an accounting between carriers, is evidence of the common arrangement for continuous carriage or shipment contemplated by Section I of the Act to Regulate Commerce. It was further held that the Flour City Line was a common carrier subject to the jurisdiction of the commission, and that the existence of through routes capable of adequately and expeditiously handling all traffic no longer constitutes a bar to the establishment of another through route by the commission. The commission was not prepared to find, however, that the 9.2 cents proportional was an absolute measure of the reasonableness of the division that should accrue to the eastern carriers on traffic reaching them via steamers in which they have no interest. The eastern carriers were required to honor through bills of lading via the Flour City Line and were not to receive a division in excess of 11 cents, which should cover the handling charges.

It is to be observed that the Interstate Commerce Commission exercised its power by virtue of the fact that the Flour City Line had traffic arrangements with the railroads west of Duluth and hence came under its jurisdiction. A water line enjoying no prorating privileges with railroads would have been outside the jurisdiction of the commission and therefore helpless. The report of the Chicago Harbor Commission, published in 1909, referring to transportation on the Great Lakes, says, "The principle of equal treatment for all requires that any responsible boat line shall be accorded the same through route arrangements that are given any other boat line." The decision in the Flour City Line case seems to go a long way toward establishing this principle for water lines which are common carriers and have traffic relations with railroads. Through routing arrangements between connecting steamship lines are, of course, outside of the jurisdiction of the com-

mission, and no other governmental agency has at present any authority to interfere with the contractual relations of these companies in this respect.

Through routing arrangements and reasonable charges for the use of wharfage facilities are among the most important privileges sought and secured by admission to membership in railroad and steamship traffic associations. Exclusion from such organizations generally deprives the carrier of prorating privileges with important railroad and steamship lines. An added disadvantage is the heavy expense of publishing a tariff schedule. An independent line outside of the traffic association must bear this expense by itself and the cost is often several thousand dollars. Where an association prepares and publishes a tariff the expense to each member may not be one hundred dollars.⁸

The terminal is an important link in the waterway system of the country. Where a responsible carrier is denied adequate facilities for receiving, landing, or transshipping his freight, the advantages of cheap water transportation are to that extent lost to the public. The present attempt on the part of the government to divorce steamship lines on the Great Lakes and elsewhere from railroad control may increase to some extent the opportunities of independent boat lines to secure better connections with land carriers. However, it does not go far in the direction of solving the problem raised by the competition of water carriers in their efforts to secure proper terminal facilities. The Mobile Dock case and the Flour City Line case are instructive as showing a disposition to recognize that a wharf used by a common carrier in its ordinary business, even if privately owned, is a public terminal, and that the relationship between connecting rail and water lines must be determined by something more than a mere private contract. Governmental regulation concerning the competitive relations between water carriers and between these and railroads are both necessary and urgent, and it is at the water terminal that this regulation is at present most needed.

ABRAHAM BERGLUND.

University of Washington.

The Bureau of Foreign and Domestic Commerce of the federal Department of Commerce has issued the following Special Consular Reports: No. 68, *Tobacco Trade of the World* (pp. 48); No. 70, *South American Market for Jewelry and Silverware* (pp. 23); No. 71, *Some Aspects of the Iron and Steel Industry in Europe* (pp. 48); also in

⁸ Testimony of Elijah Warfield in *Hearings before House Committee on Merchant Marine and Fisheries* (62 Cong.), pp. 1035-1037.

Special Agents Series, No. 95, *Rattan Supply of the Philippines* (pp. 40); and in Miscellaneous Series, No. 25, *European Markets for Fish* (pp. 36).

The Office of Markets and Rural Organization of the federal Department of Agriculture has prepared a study on *Coöperative Organization. Business Methods*, by W. H. Kerr and G. A. Nahstoll (Washington, 1915, pp. 24). There is a page of bibliography dealing with books on accounting and office practice.

Among recent Farmers' Bulletins of the federal Department of Agriculture are to be noted: No. 656, *The Community Egg Circle*, by C. E. Bassett (Apr. 6, 1915, pp. 7); and No. 672, *The Agricultural Outlook* (Apr. 3, 1915, pp. 28).

An interesting chapter describing the familiar phenomena of monopolistic relationships and discrimination in the marketing of oil is given in a recent report published by the federal Bureau of Corporations entitled *Conditions in the Healdton Oil Field* (Washington, 1915, pp. xiv, 116).

The Department of Mining Engineering in the University of Illinois and the State Geological Survey in coöperation with the United States Bureau of Mines have issued Bulletin 9 entitled *Coal Mining Practice in District III*, by S. O. Andros (Urbana, 1915, pp. 30).

William A. Prendergast, comptroller of the city of New York, has made a *Report on the Maintenance of Public Markets in the City of New York and the Financial Results to the City of the Nine-Year Period of Operation ended December 31, 1914* (New York, pp. 25).

The *Supplementary Report of the Directors of the Port of Boston*, March 31, 1915 (pp. 101) contains many maps and charts bearing upon transportation problems. One chart represents passenger and freight agreements in the North Atlantic trade; another shows the traffic movement inward via New York and Boston to 18 cities of Massachusetts, based on investigations made in 1912.

A conference was held September 10, 1914, at Washington, of representatives of Latin-American countries before the Secretary of State and the Secretary of Commerce to discuss the possibilities of extending commerce in Latin-America. A verbatim report has been published in a bulletin of the Department of Commerce entitled *Statements on the Latin-America Trade Situation* (Washington, 1914, pp. 39).

From the Department of Mines, Canada (Ottawa, 1914), have been received: *Annual Report of the Mineral Production of Canada during 1913* (pp. 263); *Petroleum and Natural Gas Resources of Canada*, vol. I (pp. 378); and *Investigation of the Peat Bogs and Peat Industry of Canada, 1911-12* (pp. 47, xxi).

The Commission of Conservation, of Canada, has recently issued an interesting and suggestive study on *The National Domain in Canada and its Proper Conservation*, by Frank D. Adams, dean of the faculty of applied science at McGill University (Ottawa, 1915, pp. 48). In its original form it was the presidential address in 1914 before the Royal Society of Canada. The pamphlet is supplied with several maps and illustrations.

Corporations

Among the reports of public service commissions, the following have been received:

First Annual Report of the Public Utilities Commission of the State of Colorado and Fourth Biennial Report of the State Railroad Commission of Colorado (Denver, 1914, pp. 258).

Abstracts of Reports of Corporations. Public Service Commission, Second District, New York, Vol. III (Albany, 1914, pp. 348). The reports are from electrical, gas, telegraph, telephone, and steam corporations.

Fifty-sixth Annual Report of the Railroad Commissioners of the State of Maine (Augusta, 1915, pp. 502).

Report of the Public Service Commission of Maryland for 1914 (Baltimore, 1915, pp. vii, 822).

Thirtieth Annual Report of the Board of Gas and Electric Light Commissioners of Massachusetts (Boston, 1915, pp. 276, 466).

Third Annual Report of the Public Utilities Commission of Rhode Island for 1914 (Providence, 1915, pp. 87, x).

Fifth Annual Report of the Quebec Public Utilities Commission (Quebec, 1914, pp. 79).

Twentieth Annual Report of the Boston Transit Commission, 1914 (Boston, pp. 202).

The National Civic Federation has published as a separate pamphlet *Shall the Government Own and Operate the Railroads, the Telegraph and Telephone Systems? Shall the Municipalities Own Their Utilities? The Negative Side* (New York, pp. 119, 50 cents).

Labor

FIFTY-FOUR HOUR LAW FOR WOMEN AND MINORS IN MAINE. The 54-hour law for women and minors under 16, approved March 31, 1915, is, in some respects, notably in its application to commercial pursuits, an advanced measure and has given rise to so much criticism that petitions for a referendum have secured the requisite 10,000 signatures; and the operation of the law is therefore suspended until after the election of 1916. The act not only prohibits the employment of women and minors under 16 at night or for more than 9 hours during the day (the hours being delimited) with a maximum of 54 hours per week, in workshops, manufacturing and mechanical establishments or laundries, but extends this same limitation so far as the 54-hour week is concerned to telephone exchanges where more than three operators are employed, to mercantile establishments, stores, restaurants, telegraph offices, express and transportation service. The law is not to apply during the rush season preceding Christmas (December 17 to 24 inclusive) nor to millinery shops and stores for the 8 days preceding Easter Sunday. Exceptions are also allowed in public service industries where, in an emergency, property or the public safety or public health is endangered, and, perhaps most significant of all for its bearing upon the sardine canning industry, "in manufacturing establishments whose materials or products are perishable and require immediate labor thereon."

WARREN B. CATLIN.

Bowdoin College.

The following reports relating to various labor problems have been published by the federal Bureau of Labor Statistics:

No. 157, *Industrial Accident Statistics*, by Frederick L. Hoffman (Mar., 1915, pp. 210). The number of annual fatal industrial accidents among American wage-earners including both sexes may be estimated at 25,000; and the number of injuries involving a disability of more than four weeks, at approximately 700,000. One section considers the movement for standardization of reporting, classifying, and tabulating statistics of industrial accidents.

No. 159, *Short-Unit Courses for Wage Earners and a Factory School Experiment*, by W. A. O'Leary and Charles A. Prosser (Apr., 1915, pp. 93).

No. 166, *Labor Legislation of 1914*, by Lindley D. Clark (Dec. 15, 1914, pp. 290).

No. 172, *Unemployment in New York City, New York* (Apr., 1915, pp. 24).

The Children's Bureau of the United States Department of Labor has published the first of a series of studies relating to the *Administration of Child Labor Laws*, with particular reference to the method of issuing employment certificates. The first report is *Part I. Employment Certificate System of Connecticut*, by Helen L. Sumner and Ethel E. Hanks (Washington, Bureau Publication No. 12, 1915, pp. 69).

The Bureau of Statistics and of Information of Maryland in the *Twenty-second Annual Report, 1913* (300 Equitable Bldg., Baltimore, 1914, pp. 225) has reported at length on a study of "Economic status of families of working children." In 1913 for the first time there was opportunity in Maryland for putting in force a thoroughgoing child labor law. Various tables show the reasons why children go to work and on what grounds employment certificates have been granted. The bureau has pushed its inquiries in new directions which should be suggestive for investigators elsewhere.

The Minimum Wage Commission of Massachusetts in its Bulletin No. 6, March, 1915, deals with *Wages of Women in Retail Stores in Massachusetts* (Boston, pp. 64). Tables show the actual weekly earnings by occupations, fluctuation of employment among some 6000 workers, and extra earnings. The investigation covers five-and-ten-cent stores.

The *Second Annual Report of the Minimum Wage Commission of Massachusetts* for 1914 (Boston, 1915, Pub. Doc. 102, pp. 158) summarizes the work of the board particularly in the confectionery, laundry, and retail shoe industries.

The *Second Annual Report of the State Board of Labor and Industries* (Boston, 1915, Pub. Doc. 104, pp. 60) has pages on industrial hygiene and the administration of the home work division.

Report No. 4 of the Department of Investigation and Statistics of the Industrial Commission of Ohio deals with *Industrial Accidents in Ohio, January 1 to June 30, 1914* (Columbus, 1915, pp. 324). It not only contains statistics of claims and awards but also tabulates data relating to 26,810 injuries. "This is the first comprehensive report on accidents which has ever been published in Ohio and is one of the few reports of this character which have appeared in the United

States." Statistics are given which show the nature and extent of the resulting disability, previous experience of injured employees, and their ability to speak English.

A committee organized by the American Association for Labor Legislation submitted to the Constitutional Convention of New York State, under date of June 9, 1915, *Constitutional Amendments relating to Labor Legislation and Brief in their Defense* (Prof. H. R. Seager, chairman, pp. 59).

The June, 1915, issue of the "American Labor Legislation Review" deals with *Unemployment*, containing the proceedings of the *Second National Conference and Reports of Investigations* with supplemental bibliography (New York, 131 East 23d St., pp. 463, \$1).

There has appeared the *Proceedings of the First Annual Convention of the Association of Governmental Labor Officials; Twenty-eighth Annual Convention of the International Association of Factory Inspectors; and the Thirtieth Annual Convention of the International Association of Labor Commissioners*, held at Nashville, Tenn., June, 1915 (W. L. Mitchell, Nashville, pp. 220).

Money, Prices, Credit, and Banking

Reports on state banking have been received as follows:

Annual Report of the Superintendent of Banks of Alabama for 1914 (Montgomery, 1915, pp. 149).

Annual Report of the State Bank Commissioner of Colorado for 1914 (Denver, 1914, pp. 247).

Report of the Bank Commissioners of Connecticut (Hartford, 1914, pp. 423).

Twenty-third Annual Report of the Secretary of the State Banking Board of Nebraska, 1914 (Lincoln, 1915, pp. xxxiv, 381).

Report of Savings Banks, Trust Companies, Safe Deposit Companies, Miscellaneous Corporations, and Personal Loan Brokers (Albany, 1915, pp. 665).

Report of the Bank Commissioner of Utah, 1913-1914 (Salt Lake City, 1915, pp. 105).

Eighth Annual Report of the State Examiner of Washington (Olympia, 1915, pp. 112).

Banking Law of the State of Idaho, compiled by G. R. Hitt, state commissioner, has been reprinted. Copies may be had of the Boise City National Bank, Boise, Idaho (pp. 36).

Public Finance

The Superintendent of Documents has issued a special price list of public documents on *American Finance* (No. 28, 1914, pp. 40).

Among the reports of state tax commissions the following are to be noted:

Second Biennial Report of the Arizona State Tax Commission (Phoenix, Dec. 28, 1914, pp. 158). This contains a vivid account of the new assessment by which the valuation of the state was raised 267 per cent in a single year. An extended discussion is given to mine taxation.

Report of the State Board of Equalization of California for 1913-1914 (Sacramento, 1914, pp. 237). Some 25 pages are devoted to a discussion of new sources of revenue.

First Biennial Report of the Tax Commission of Florida for the period ending December 31, 1914 (Tallahassee, 1915, pp. 48). This commission started to enforce a full cash value assessment, but compromised temporarily at a rate of 50 per cent. It hopes later to issue instructions enforcing a higher valuation.

First Biennial Report of the Idaho Tax Commission, 1913-1914 (Boise, 1914, pp. 112). A supplement contains a special report on the tax situation in Idaho sent in February 14, 1914.

Report of Tax Commissioner of Massachusetts for 1914 (Boston, 1915, pp. 142). Several pages are devoted to the new stock transfer tax and to the optional registration of bonds for purposes of taxation.

Eighth Report of the Board of State Tax Commissioners and State Board of Assessors of Michigan, 1913-1914 (Lansing, 1915, pp. 13).

Fourth Biennial Report of the Minnesota Tax Commission (St. Paul, 1914, pp. 435). Particular attention is given to taxation of mines and minerals, and the previous studies on cost of government are continued.

Second Biennial Report of the North Dakota Tax Commission (Bismarck, 1914, pp. 204). Contains chapters on cost of government, assessment of bank stock, railroad taxation, and tax commissions.

Fourth Annual Report of the New Hampshire State Tax Commission for 1914 (Concord, 1914, pp. 146). As New Hampshire has recently enforced the policy of full cash valuation, several pages are given to a definition and discussion of the principle.

The auditor of public accounts of Virginia, C. Lee Moore, has prepared a pamphlet, *Virginia Tax Laws 1915 with the Provisions of the Code and Acts of the Assembly in relation to the Duties of the Com-*

missioners of the Revenue and Treasurers of the Several Counties and Cities (Richmond, Apr., 1915, pp. xlv, 168) which briefly describes sources of income.

The New York Tax Reform Association (29 Broadway) has published as No. 560 a review of *Tax Legislation, State of New York, 1915; With Abstract of Changes in Other States*.

The bulletin of the Bureau of Municipal Research (261 Broadway, New York) for April, 1915, is devoted to a discussion of *The Condition of the New York State Sinking Funds* (pp. 273-308).

Volume X of *The Finance Commission of the City of Boston: Reports and Communications* (Boston, 1915, pp. 294) contains among other documents a special study on street lighting.

The Guaranty Trust Company of New York (140 Broadway) has published *The Secured Debts Tax Law* (pp. 13) and a booklet describing the financial principles of *Amortization* (pp. 12).

In November, 1914, a special committee of the city of Cambridge, Mass., was appointed to make a report upon the assessment of real estate. As a result a pamphlet has been issued, *Report of Special Committee on Study of the Local Real Estate Assessment Situation with Recommendations* (Cambridge, Mar. 25, 1915, pp. 14). The committee recommends that the office of assessor be made appointive, that equalization maps be provided, and that a civil engineer be employed to prepare mathematical rules and tables for the valuation of real estate.

Demography

Infant Mortality Series No. 4 issued by the federal Children's Bureau is entitled *Infant Mortality: Montclair, N. J. A Study of Infant Mortality in a Suburban Community* (Washington, 1915, pp. 35). The study is of considerable interest because it shows the facts regarding a particularly favored suburban community in charge of an efficient health officer. The general infant death rate was 84.6 as against an estimated rate of 124 for the birth-registration area of 1914.

The Children's Bureau has also issued: *Birth Registration and Aid in Protecting Lives and Rights of Children*; and *New Zealand Society for the Health of Women and Children, An Example of Baby Health Saving in Small Towns and Rural Districts* (pp. 18).

The Immigration Restriction League has issued Leaflet No. 63 on *The Reading Test; Why It Should be Adopted* (pp. 6).

Social Problems

The *First Semi-Annual Report of the Department of Public Welfare* of Chicago (Chicago, 1915, pp. 125) contains: A report of an investigation of unemployment in Chicago (pp. 15-21); preferential employment system; farm employment bureaus; city farming; labor agencies in Chicago; and vocational education. There are also reports of the Bureau of Social Surveys on "the concentration of misery," cheap lodging houses, a housing survey in the Italian district, with illustrations, and on the function of a farm colony.

The Joint Board of Sanitary Control in the Cloak, Suit, and Skirt and the Dress and Waist Industries of New York City (31 Union Square West) has issued *Worker's Health Bulletin*, in which suggestions are given for the care of health.

Insurance and Pensions

THE AMERICAN WORKMEN'S COMPENSATION ACTS OF 1915. Not since 1911, the year of the earliest permanent enactments, have so many states adopted workmen's compensation in a single year as in 1915. To the 23 older statutes 8 new ones have been added, in Colorado (c. 179), Indiana (c. 106), Maine (c. 295), Montana (c. 96), Oklahoma (c. 246), Pennsylvania (acts 338-343), Vermont (no. 164), and Wyoming (c. 124). Three fourths of the population of continental United States now may be reckoned as within the compensation area, and more than three fourths of the industry. Aside from 10 southeastern states, there remain now without compensation laws only Idaho, the Dakotas, Utah, New Mexico, Missouri, and Arkansas.

The former proportion of one fourth compulsory compensation states and three fourths optional or elective, is preserved by the enactment of compulsory laws in Oklahoma and Wyoming. In Indiana, Maine, Montana, and Vermont the new laws are made optional in quite the familiar way, by abolishing the three common law defenses for such employers as refuse to accept the compensation system and preserving them for such as will accept. But in Colorado the defense of the assumption of the ordinary, the "inherent and necessary" risks is not abolished but remains available as before. And in Pennsylvania all of the defenses are abrogated completely and unconditionally, as in New Jersey: they are not to be retained by the employer whose employees, refusing the compensation system, stand upon their rights of action.

In Montana, Oklahoma, and Wyoming the application of the law is limited to employments which are enumerated in lists and are charac-

terized as hazardous or extra-hazardous, although the lists, not widely different in the three states, include nearly all ordinary industrial occupations in mining, construction, manufacturing and mechanical trades, transportation, and communication, without discrimination according to any established or probable differences of hazard. In the other states the law applies to all employments not specifically excepted, that is, in most of these states, to all employments in trade or business except those in farming and interstate and foreign commerce. Maine excepts also the logging operations of her lumber industry; and Vermont does not, in direct terms, except farming. In Indiana and Pennsylvania employments outside of trade or business are not excluded generally; but in none of the eight states is domestic service covered.

Everywhere it has been the apparent purpose to cover public employments as well as private. Indeed, the six states which leave the compensation optional for private employers declare it compulsory for all or nearly all public employers, from states down to towns and school districts. It is unmistakably optional for the towns of Maine. Oklahoma probably nullifies her inclusion of public employers by an unqualified restriction of the employments which are covered to such as are carried on for pecuniary gain; and some obscurities of phrasing make it no more than a matter of strong probability that the Vermont system was intended to be mandatory upon the state and optional for all subordinate political units. Only in Colorado, Maine, Vermont, and Wyoming is it made clear that officials or elected officials are not to be construed to be public employees.

Employers having less than three employees are not affected in Oklahoma. Among private employers only those having at least four regularly engaged in the same business or employment are affected in Colorado. In Wyoming only those employers who have had at least five in continuous employment for more than one month at the time of an accident need pay compensations except in certain few occupations. In Maine employers are excepted who have not at least six employed in the same business; and in Vermont exception is made at the unusually high figure of ten regular employees. In Indiana, Montana, and Pennsylvania there are no numerical distinctions.

Casual employees are excluded from the benefits of the law generally in Indiana, Maine, Vermont, and Wyoming. They are excluded in private employments in Colorado and in private employments outside of trade or business in Pennsylvania. They are not excluded at all in Montana or Oklahoma. It is true that, in terms, employment "of a casual nature" is excluded in Montana; but it is later declared that

"casual employment means employment not in the usual course of trade, business, profession, or occupation of the employer." In general, all classes of employees are covered. But in Oklahoma only manual and mechanical laborers are included; in Wyoming those are excepted who in clerical positions are not exposed to the hazards of the business and those in official positions or representing the employer; in Vermont none in either public or private service at more than \$1500 a year are covered.

In Colorado, Maine, Montana, and Vermont provision is made for the purely voluntary election of the law by employers who are not deprived of their defenses. In Indiana there was the same purpose; but it probably fails because the statute contains no statement of a "manner hereinafter specified" for the election.

In Colorado, Indiana, Pennsylvania, and Vermont the acceptance of the optional system by both employer and employee is presumed, in default of notice to the contrary; and in Pennsylvania the procedure for indicating non-acceptance is so elaborate that it must prove to be a task for most employees and for some employers. In Maine and Montana the employer's election is not presumed but must be signified by his positive action, while the employees of employers who have elected are presumed to have elected also, until they may notify their refusal.

Extra-territoriality, not often faced squarely by the legislators of former years, has interesting treatment in the statutes of 1915. Indiana declares pointedly that her act shall apply to injuries alike whether received "within the State or in some other State or in a foreign country." Pennsylvania, at the other extreme, declares with equal plainness that her act "shall apply to all accidents occurring within this Commonwealth . . . and shall not apply to any accident occurring outside of the Commonwealth." Maine presumes agreements between employers and employees that injuries received outside of the state shall be covered. Vermont does exactly the same in one section, and in another makes extra-territorial application compulsory. In the other states provisions for enforcement by local process imply that the laws shall not have force outside of the several states; although the Colorado law grants compensations "wheresoever such injuries have occurred."

There is a growing tendency to allow the compensations broadly for injuries of which the conduct of the injured may have been one cause. In Montana there is no forfeiture of compensation by any sort or degree of misconduct in the employee. In Wyoming all injuries are to

be compensated except those which are due "solely to the culpable negligence of the injured employee." In Pennsylvania only by an intentional self-infliction of the injury does an employee forfeit his own compensation. In Maine only wilful intention and intoxication while on duty forfeit; and the intoxication does not, if it was known or easily might have been known by the employer. In Vermont to wilful intention and intoxication is added failure to use provided safety appliances. In Oklahoma it is the same, except that it is a wilful failure to use guards or protection furnished in compliance with law or lawful public orders. In Indiana is further added wilful failure or refusal to perform a duty required by statute. In Colorado only wilful intention forfeits completely, while the other forms of misconduct or remissness reduce the compensations by half. In Pennsylvania another is added to the small number of states granting compensation for injuries received in the course of employment without requiring proof that the injuries arose out of the employment. Industrial diseases probably are not to be compensated in any of the states. They are not mentioned in any way in Colorado or Maine; and they appear to be excluded in the other states.

With some striking exceptions, to be noted duly, the benefits provided by the new laws are not so liberal as those provided in the more recent of the earlier laws. The waiting period is 10 days in Wyoming, 21 days in Colorado, and 14 days in the other states, an average of $14\frac{3}{8}$ days, as against an average of $11\frac{1}{2}$ in the earlier acts. Medical care, which employers often are disposed to furnish liberally, in their own ultimate interest, the new laws grant in closely restricted amounts. There is none in Wyoming. It is limited to a period of two weeks in Maine, Montana, Pennsylvania, and Vermont, to 15 days in Oklahoma, and to 30 days in Colorado and Indiana. In ordinary cases its cost is limited to \$100 in Colorado, to \$75 in Vermont, to \$50 in Montana, to \$30 in Maine, and to \$25 in Pennsylvania. This means an average term of $16\frac{3}{8}$ days and, as among the states with limits of cost, \$56. Among the states with compensation laws in force at the beginning of the year there were 4 which did not limit the duration of the medical care; and for the other 19 the average term was more than 28 days. The average amount where the cost was limited was \$150; and there were eight states which set no limit of cost.

Except in Wyoming, where all awards are in absolute amounts, the cash benefits are computed most often on the 50 per cent basis; but there are several other percentages used, in one place or another, and there are so many limitations, both in current payments and in totals

allowed, that the relations between compensations and earnings vary widely.

For the general run of partial disabilities the weekly payments may not be more than \$8 in Colorado, \$10 in Maine, Montana, Oklahoma, Pennsylvania, or Vermont, or \$12 in Indiana. It is noteworthy that Oklahoma, like Minnesota, applies the same minimum to partial as to total disabilities, \$6 a week or full lower wages, so that it is quite possible for a low-paid and partially disabled employee to find himself in receipt of an increased income after his injury. On the other hand, in Montana the award for partial disability, plus what the injured person is still able to earn, must not exceed the maximum award for total disability, *i.e.*, \$10 a week; so that those earning more than \$10 a week may be disabled, even seriously, without being entitled to any compensation. Wyoming makes no awards for temporary partial disabilities. Commonly the payments for partial disability may continue up to 300 weeks; but in Colorado the aggregate of payments may not exceed \$2080, and in Montana payments may not continue longer than 50 weeks for temporary cases or 150 for permanent.

For specific maimings most of the new laws follow the established American custom and award compensations at about half of full earnings during definite terms and in lieu of all other payments. But Wyoming grants only lump sums, from \$50 for a minor toe to \$1000 for the complete loss of an arm or a leg. Colorado ungenerously computes the awards at half of the loss of earning power rather than at half of full earnings. On the other hand, Maine makes these allowances not to the exclusion of all others but for a presumptive total disability attending the injury, and supplements them with the regular allowances for any resultant partial disability. In Indiana the percentage of earnings, at from \$10 to \$25 a week, is 55, so that the payments may run at from \$5.50 to \$13.20. Pennsylvania distinguishes not nearly so many maimings as the other states, only five, in fact. In most of the states both maxima and minima are the same as for total disabilities; but Vermont fixes no minimum for the maimings.

The new legislation shows a growing tendency to the allowance of compensation for disfigurement, especially of the face, regardless of any necessary disability to work or earn but upon the assumption of a probably lessened ability to secure employment. Only three of the eight states grant such awards, Colorado, Indiana, and Maine; but there were not more than three among the 23 earlier states which did as much. In Indiana the award for disfigurement may be as high as \$13.20 a week and may continue during 200 weeks.

For total disability Wyoming grants definite sums, per month where the disability is temporary and in lump where it is permanent. As in the earlier laws of Washington and Oregon, the amounts increase with the numbers dependent upon the injured, rising from \$15 a month to \$35 and from \$1000 to \$2500. Indiana grants 55 per cent of earnings; but the other states compute at 50 per cent and with many limitations and provisos. Within limits of \$8 a week and \$5 or full lower wages, Colorado pays the compensation as long as the disability continues, even throughout life. At from \$13.20 to \$5.50 Indiana allows payments as long as 500 weeks, but never to a total of more than \$5000. At from \$10 a week to \$4, Maine limits to 500 weeks and \$3000. At from \$10 a week to \$6 or full lower wages, Montana allows payments as long as 300 weeks for temporary disabilities; for permanent disabilities the initial rate continues for 400 weeks, thereafter to be followed by \$5 a week during life. Within the same limits as in Montana, Oklahoma continues payments as long as 300 weeks for temporary disabilities and as long as 500 for permanent. At from \$10 a week down to \$5 or full lower wages, Pennsylvania sets maxima of 500 weeks and \$4000. Within limits of \$12.50 and \$3 or full lower wages, Vermont restricts payments in ordinary cases to 26 weeks for temporary disability and to 260 for permanent, but allows extensions of 52 weeks for special cause.

Perhaps the most striking feature of any of the year's compensation laws is the omission of all death benefits in Oklahoma, where the law makes no change whatever in the liabilities and rights arising from fatal industrial accidents. In Wyoming modest lump sums, in ordinary cases from \$1000 to \$2000, are to be paid. In Colorado the nominal allowance to those totally dependent is half pay; but it can never run at more than \$8 a week, or longer than 6 years, or to a total of more than \$2500. In Indiana it is from \$5 to \$12 a week during the term of dependence, not above 300 weeks. In Maine, within limits of \$4 and \$10 a week, it may continue not later than 300 weeks after the date of the injury. In Montana death benefits may be paid only if claimed within six months of the date of the accident; and, within the limits of \$10 a week and \$6 or full lower wages, they may be paid as long as 400 weeks at rates varying from 30 per cent of wages to 50 per cent, according to the relations of the beneficiaries and dependents to the deceased and without regard to their numbers. In Pennsylvania wages are to be taken at from \$10 a week to \$20 for the computation of death benefits; and awards at from 15 per cent to 60 per cent, according to the numbers of the dependents and their relations to the deceased,

are payable for a presumptive normal maximum term of 300 weeks. But there is a special proviso, unmatched elsewhere in America, that from 15 per cent to 50 per cent of wages may be continued beyond the 300 weeks as long as there remain dependent children under 16 years of age. In Vermont wages must be taken as from \$5 a week to \$25; and, for maximum terms of 260 weeks, death benefits are to be paid at from 15 per cent to 45 per cent (from \$.75 to \$11.25 a week) according to the numbers and relations of the dependents and their measure of dependence upon the deceased. There is no discrimination against alien or non-resident dependents in Indiana or Vermont. In Colorado death benefits are payable to dependents not resident in the United States in but one third of the regular amounts and never to exceed \$1000. To alien dependents not resident in the United States or Canada, Maine allows but half of the regular amounts. In Montana only widows, widowers, and children are recognized as entitled to death benefits if not resident in the United States; and these have but half of the full awards. In Pennsylvania only widows and children among alien non-residents of the United States are entitled to compensation as dependents; and these at two thirds the regular rates. In Wyoming only widows and children among alien non-residents are entitled to the payments; and these at but a quarter of the full amounts.

The new statutes generally incorporate all of the recognized and standard provisions for safeguarding and enforcing the employee's rights and his awards. In Maine and Vermont public employers are not required to insure or guarantee their risks. Otherwise all employers are required either to insure or guarantee their liabilities or to satisfy the commissions of their individual solvency and ability to pay directly the compensations granted by the statutes. This formal requirement, of course, is not found in Wyoming, where the compensation system is administered exclusively through a compulsory state insurance fund; and in Indiana, Maine, and Oklahoma approved schemes of employer's benefits may be substituted fully for the obligations of the compensation laws. In every one of the states except Wyoming, proof of individual ability to pay directly is mentioned expressly as one of the permitted methods of assuring the payments.

State compensation insurance funds are established in Colorado, Montana, Pennsylvania, and Wyoming—in the last-named state as the exclusive and compulsory means of covering risks and administering the system, in the other states as a means available at the employer's option. In Colorado and Montana the funds are under the direction of the commissions which administer the compensation laws; in Penn-

sylvania there is a State Workmen's Insurance Board, constituted of the commissioner of labor and industry, the insurance commissioner, and the state treasurer; in Wyoming the state auditor and the state treasurer have charge. In Montana and Wyoming the funds are essentially of the Washington type, with basic or standard premiums which are fixed in the statutes but are to be assessed and collected only to the extent found or judged necessary to meet claims. In Colorado and Pennsylvania the rates are to be determined more nearly after the manner of private insurance companies and with express and definite reference to the maintenance of reserves and surpluses. There is, however, in the laws of Montana and Wyoming nothing to prevent the administration of the funds in accordance with sound financial principles. Indeed, the only vicious financial principles laid down in the statutes are the Pennsylvania one, that premium rates "shall take no account of any physical impairment of employees or the extent to which employees have persons dependent upon them for support," and the Colorado one of substantially similar meaning. In Pennsylvania and Wyoming the funds are to be subsidized generously by the states, in Pennsylvania until July 1, 1919, in Wyoming permanently. In Colorado and Montana the funds are, apparently, to be self-supporting from the first. In Colorado, Indiana, and Pennsylvania there are special provisions to encourage mutual liability insurance associations.

With the single exception of Wyoming, the states commit the administration of the new laws to specially constituted boards or commissions. In Colorado, Indiana, and Montana the commissions have such general relations to industry that they may be considered industrial commissions. In Oklahoma, as also in Colorado, the board is designated as an industrial commission, but its duties are limited to the administration of the compensation law. In Montana the burdens of the board will rest largely upon the chairman; for he alone is an "appointed member" and has a salary. With him are associated, *ex officio*, the commissioner of labor and the state auditor, without additional pay. In Maine it is entirely clear that the burdens must be largely the chairman's. Here again he alone is specially appointed; and, while the insurance commissioner and the commissioner of labor and industry, associated *ex officio*, have certain specific duties under the law, and have additional pay of \$500 a year each, the important functions are assigned definitely to the chairman. In Pennsylvania there is an elaborate organization of a Workmen's Compensation Board and a Workmen's Compensation Bureau in the Department of Labor and Industry. In Vermont there

is an appropriately modest Industrial Accident Board of three appointed members. In Wyoming all claims must be presented in the ordinary law courts. But there are unusual provisions for making suits both easy and inexpensive for claimants.

The commissions generally are vested with the large powers which have come to be customary for such bodies in the United States, powers to determine, revise, and commute compensations in more or less summary ways. In Indiana, Maine, Oklahoma, and Pennsylvania the commissioners' findings of fact are conclusive; but, unfortunately, in Colorado, Montana, and Vermont appeals to court may be taken on questions of fact as well as on questions of law. Uncontested or final decisions and awards are enforceable as judgments of court. In Colorado, Indiana, Maine, Oklahoma, Pennsylvania, and Vermont the commissions may approve and validate privately made agreements between employers and employees which are in accordance with the schedules of the statutes. But such settlements are not allowed in Montana; and, of course, none are allowed, formally and expressly, in Wyoming.

In some of the states the new laws come into effect part by part. The dates of full effectiveness are as follows: April 1, 1915, Wyoming; July 1, 1915, Montana and Vermont; August 1, 1915, Colorado; September 1, 1915, Indiana and Oklahoma; January 1, 1916, Maine and Pennsylvania.

WILLARD C. FISHER.

REPORTS OF THE INVESTIGATIONS OF FIRE INSURANCE COMPANIES: MISSOURI, PENNSYLVANIA, ILLINOIS, NORTH CAROLINA. Fire insurance is undergoing investigations somewhat similar to the investigations of life insurance which began in 1906, except that the present inquiries concern themselves primarily with the question of rates and combinations among companies. There is no attack upon the efficiency of the companies or the security of the contracts.

During the past decade there have been periodic reports of legislative committees or appointed commissions which have endeavored to inform the public regarding the methods of arriving at rates in fire insurance, but judging from the continued investigations, past investigators have not satisfactorily explained the question.

Many believe that the fire loss on different classes of property in the state should form the basis of rate making for that state. Many also think that the fact that most companies use the rates derived by the rating bureaus prove a combination among the companies to charge the same price for the insurance. This sentiment is strengthened by the

fact that in most cases the larger amount of the fire insurance business in any one state is done by foreign companies, that is, companies chartered in other states, and to a less extent in foreign countries. To witness large sums in excess of the annual fire loss in the state flowing to foreign states and countries appears to many to be a loss, and this failure to "keep money at home" supplies an argument for the organization of home companies, for state insurance, and for restrictive rate legislation.

Much of the dispute regarding rates has centered about the status of inspection or rating bureaus. These organizations are found in practically all states. They are distinct from the insurance companies as such, having for their prime purpose the making of rates to be charged for the fire hazard in a state, a section of the state, and cities. This service is then sold to the fire insurance companies; and since this means a single source of information for the many companies which sell indemnity, it seems that something approaching monopoly prices results. The potential economies are very great. For theoretically, if each company should perform this service individually, the results would be the same, and thus there would be an unnecessary expense. In only a few states have such rating organizations been brought under the strict supervision of the insurance department. In some states they have been either legislated out of existence or have had their work seriously handicapped.

The fire insurance business in Missouri has been in a very much disturbed condition for several years. The Orr law, enacted in 1913, was a stringent anti-trust law applying to insurance companies. Many of the companies refused to do business under it and prepared to withdraw from the state, whereupon they were threatened with prosecution under the anti-trust law, since an agreement to withdraw was held to be a conspiracy. An agreement between the officials of the state and the companies was reached, under which the law was not to be enforced pending an investigation of the whole subject by a commission. This commission reported in 1915, and its report formed the basis of a new law governing fire insurance companies. One of the important provisions of this law is that it permits the operation of rating bureaus under the supervision of the state insurance commissioner. A schedule of rates remains in effect five years, under the experience of which rates are adjusted. It is believed that this new insurance code goes a long way in securing all the desirable results of private insurance with adequate supervision. It avoids the questionable practice of state-

made rates. Either there should be insurance by the state under its own determined rates or private insurance with supervision of rates. With all the extreme power which a state has over insurance it is difficult to understand what would be gained if the state should make the rates rather than supervising rates for private companies.

The Pennsylvania commission was a joint commission of the legislative bodies, provided for in 1913 and reporting in 1915. It was appointed for the especial purpose of investigating "various combinations of fire insurance companies." Including commissions, the fire loss, and other topics, it laid most stress upon the work of rating bureaus and concluded: "Such combinations of insurance companies or their representatives, such as their agents, are not opposed to public policy, are necessary to the solvency of insurance companies and are beneficial to the public." The report further recommends the proper control and supervision of such organizations. On the whole this report is favorable to the fire insurance companies.

The Illinois report, which has occasioned considerable discussion, was a special report by the superintendent of insurance to the governor. A conservative report of a special commission of the legislature had been made in 1911. The present report lacks judicial character. It strongly urges state insurance without any very close analysis of the experience in other countries, or sound reason for its adoption in Illinois. The fire insurance companies are accused of being a "combine" exercising monopolistic powers. The report is full of assertions without proof. It is a good example of the typical attack on trusts so common ten years since.

The North Carolina legislative committee reported in 1914. It gave particular attention to rating bureaus and commissions. The investigation seems to have been well done and is of a constructive character. The commission recommended the enactment of the Kansas law on rates, which gives to the insurance commissioner large control over rates. It also recommends that additional power of investigation of fires be given the state insurance commissioner.

Several other states, either by commissions or by the state insurance commissioner, have investigated the fire insurance companies.

In the midst of all the confusion regarding fire insurance several tendencies may be said to be clear:

First, there is some indication that the public is securing a better understanding of the function of a fire insurance company. However slow the progress may be, property owners are beginning to realize

the importance of fire prevention both by proper building and by better protection. The fire loss apparently continues as large as in the past, but a careful analysis will prove that substantial progress has been made and greater progress is assured.

Second, there is a marked tendency to supervise rates more closely; in some cases for the state to make the rates, but this tendency is not as strong as several years ago.

Third, there is some tendency to standardize the commissions paid to agents for writing the business.

Fourth, there is a decided tendency to compel companies to coöperate under the supervision of the state in arriving at rates. The companies in some states are required to file the results of their experience on different classes of property. Unfortunately there is a too well marked tendency to make state experience the basis of determining the rates.

W. F. GEPHART.

Washington University.

Laws Relating to Mothers' Pensions in the United States, Denmark, and New Zealand (pp. 102), published by the Children's Bureau of the federal Department of Labor, contains a five-page list of references.

Note should be made of the *Report of the New York State Commission on Relief for Widowed Mothers* transmitted to the legislature March 27, 1914 (Albany, pp. 584). A chart shows the nature of mothers' pension and allied laws in other states.

The eighth annual meeting of the Minnesota Academy of Social Sciences was devoted to the general topic "Woman and the state." *Papers and Proceedings* have been edited by Professor J. F. Ebersole (206 Mechanic Arts Bldg., University of Minnesota, Minneapolis, 1915, pp. 203). Several papers deal with mothers' pensions and allowances to the dependent children of widows.

Among reports on workmen's compensation to be noted are:

Report of the Board of Compensation Commissioners of Connecticut, 1913-14 (Hartford, Pub. Doc. No. 58, pp. 32).

Michigan Employers' Liability and Workmen's Compensation Act (pp. 36), a reprint of the law.

Report of the Nevada Industrial Commission, July 1, 1913 to December 31, 1914 (Carson City, 1915, pp. 108); and *Report of Investigation in Re-claim Number 192* (pp. 30).

Report of the Employers' Liability Commission Appointed for the Purpose of Observing the Operation of the Employers' Liability Act (Trenton, 1915, pp. 48).

Report of Industrial Accidents Commission of Pennsylvania, 1915 (34th and Chestnut Sts., Philadelphia, pp. 53).

Financial Statement Showing Condition of Accident Fund on April 1, 1915 (Industrial Insurance Commission of the State of Washington).

The *Fifty-sixth Annual Report of the Superintendent of Insurance of the State of New York. Part I. Fire and Marine Insurance* (Albany, 1915, pp. 1308) contains 10 pages of text relating to workmen's compensation legislation in New York from the standpoint of insurance theory and experience.

The Insurance Society of New York has printed in pamphlet form the following addresses delivered before the society: *The Rights of Administrators and Executors over Real Property in connection with the Standard Policy*, by F. O. Affeld, Jr. (Jan. 19, 1915, pp. 18); *The Claim—The Proof of Loss—When is Loss Payable?* by Robert J. Fox (Feb. 2, 1915, pp. 30); *Former and Present Day Methods of Adjustment*, by Samuel R. Weed (Feb. 16, 1915, pp. 15); *Ownership*, by Edgar J. Nathan (Mar. 16, 1915, pp. 17); *Some Observations upon the Business of Fire Insurance as Generally Conducted as a Field for the Investment of New Capital*, by Richard M. Bissell (Apr. 22, 1915, pp. 17); *The State and the Insurance Company*, by David Rumsey (pp. 13); and *The Inspector and the Insured*, by P. M. Griswold.

The Thrift Publishing Company of New York City has for sale *The American Underwriter's Pocket Chart of Life Insurance Companies Operating in the United States for the year ending December 31, 1914*, compiled from special reports secured by "The American Underwriter" (price 25 cents).

Statistics

THE CENSUS REPORT ON OCCUPATIONS: A REPLY. In the March number of this journal (p. 184) there appeared a review of "The Thirteenth Census Report on Occupations." Mr. Knight, the writer of the review, states that the new classification followed in the occupation report is "a compromise between the older American classifications and the so-called 'international' classification prepared by Dr. Jacques Bertillon for the International Statistical Institute. . . ." This is incorrect. Dr. Bertillon's classification was examined carefully and was

valued highly, but, in formulating a classification, neither our old classification nor Dr. Bertillon's was followed. However, many valuable suggestions were taken from Dr. Bertillon's classification; and, while our new classification can not be said to *follow* Dr. Bertillon's, it is constructed on the same *general* lines and is very similar to it in many respects. Each purports to be a detailed occupational classification with an industrial framework. But while Dr. Bertillon's classification is an undoubted improvement over many of the classifications now in use it is, nevertheless, in many respects a classification by industries rather than by specific occupations, since, frequently, the workers are classified according to what they make rather than according to what they do—according to the *product* to which their services contribute rather than according to the particular processes which they perform. In "Extraction of Minerals," for example, the names of the minerals extracted, as coal, anthracite, peat, etc., are given throughout, and in no case the actual occupations of the workers, as blasters, laborers, foremen, etc. And in "Manufactures," in about two fifths of the cases only the names of the materials worked upon, as jute, laces, ivory, crockery, etc., are given.

In the new classification formulated for the Thirteenth Census report on *Occupation Statistics*, an effort was made to classify occupations with respect to the kind of work done or the character of the service rendered, rather than according to the article made or worked upon, or the place where the work was done. The industrial feature, so common in many classifications, was eliminated except as it served as an aid in showing more clearly and exactly the occupational positions of the different workers. The result was an *occupational* classification with an industrial framework—a classification which shows each specific, elementary occupation in each important industry and service group.

It is true, as Mr. Knight states, that the report is rather lacking in tables comparing the occupation statistics of the Thirteenth and earlier censuses. The original plans for the report contemplated other comparative tables, but, unfortunately, because of a lack of funds, the work on occupations was practically stopped for an entire year, and as a result, the Thirteenth Census period had elapsed before the report was near completion. Then, in compliance with the recommendations of a special advisory committee¹ it was decided to abandon the second and

¹ The members of this committee were S. N. D. North and William R. Merriam, former Directors of the Census; Professor Walter F. Willcox, of Cornell

more complex machine count of the occupation cards and limit the scope of the occupation report to the tables which could be constructed from the first count of the cards. In fact, the recommendation of the committee was "that the tables yielded by the first run of the cards be printed without derivative tables or text."² But this recommendation was departed from sufficiently to allow the inclusion in the report of 67 pages of text and text tables.

The increase of the general divisions of classification from five to eight, is one of the few new features of the report on occupations which the reviewer seems to consider real improvements. While this change is believed to be a real improvement, and while it is important that the number of general divisions in an occupation classification correspond with the natural groups into which the workers fall through similarity of occupation, environment, station of life, and the industries in which they work, yet, after all, the number of general divisions in a classification and the grouping of the occupations under them is of far less importance than is the careful and detailed reporting of the individual, specific occupations; for if the different specific occupations are reported separately they will admit of any grouping desired, and the resulting groups can be placed in any general division desired. At most, the general divisions are but a part of the industrial framework of a classification. As part of a useful framework they should be retained and perfected, but they should never be allowed to obscure the real essential of any meritorious occupation classification—the logical and practical classification of the individual occupations.

Probably the most important question raised in the review under discussion is whether the detailed classification presented in Table VI of the occupation report—a classification which shows each important occupation in each of the principal industries and service groups—is too detailed. Mr. Knight thinks it is, and I am sure he is not alone in so thinking. There are many others, however, who think otherwise, and among these are some of the leading statisticians and economists of the United States. A number of these gentlemen were consulted before the final form of the classification was decided upon, and I have their valuable suggestions before me. All of them agree that occupations should be reported in as great detail as the nature of the returns

University; Mr. W. S. Rossiter, formerly Chief Clerk of the Census; and Hon. Daniel C. Roper, First Assistant Postmaster General, and formerly an official of the Census Bureau.

² *Quarterly Publications of the American Statistical Association*, vol. XIII, no. 103.

and the practicable size limit of the report will permit. One of our leading statisticians says:

It might even be preferable for certain purposes to give the occupations as actually stated [by the enumerators] and arrange the same in alphabetical order. . . . It is of the utmost importance that every occupation followed should be stated in the Census, for it is certainly as significant to know the trades as yet but imperfectly developed as to know the very large aggregations where a decrease or an increase is not necessarily of any particular significance.

A professor of economics in one of our largest universities says:

Personally, I believe that the greater the number of occupational groups established the greater the value of the data for statisticians, who go to the Census for raw material rather than for summary statements. . . . It may be urged that one important object of the Census is to provide raw material as nearly in the raw state as possible, thus enabling each investigator to get data rather than summaries, and to make his own synthesis. It is always possible for an investigator to combine small groups into larger, but never possible for him to divide large groups into smaller component ones. . . . The combination of groups which he might wish to make in connection with special investigations is indefinitely great and cannot be determined by the Census Bureau. Any massing together of groups tends to stop off such work. Since the Census Bureau cannot anticipate the thousands of questions, an answer to which will be sought in the Census, it should present detailed data which can be worked up as may be required. . . . I would urge that the number of groups be made as large as is practically possible, and that as near an approach as possible be made to the ideal occupational census, wherein every species of occupation actually developed is recognized. A perfect occupational census would reflect exactly, minutely and completely the division of labor in industry.

An examination of the reports of the recent investigations of social and social-economic questions, and of the legislation recommended or enacted on these questions, shows conclusively that our investigators, and many of our legislators, are taking cognizance of the importance of specific occupations and are no longer content with studying, or with passing legislation for entire industries. In numerous social and social-economic problems, the solution requires an intimate knowledge of the occupational status of the workers concerned. This knowledge can be secured only through an intensive study of the actual processes performed or services rendered by these workers. And, in each industry, this study must be as detailed as the division of labor is great.

If we would be specific in our discussion of occupations, we must first have statistics of specific occupations. Such statistics may be difficult to secure, and they may be expensive to tabulate and report, but, with the ever increasing complexity of our present-day industrial processes, it is becoming more and more evident that the old-fashioned industrial-group occupation statistics are becoming less and less worth

collecting and reporting, for they are contributing less and less toward the solution of those problems in which occupation is a factor.

The detailed occupation statistics presented in Table VI of the occupation report are not above criticism. Their principal defect, however, is not that the occupations are presented in too great detail. In fact, the detail is not sufficiently minute to meet the demands now being made on the Bureau of the Census. As stated in the report, Table VI can not be considered an exact and technically correct presentation of each specific occupation which is pursued in each of the industries and service groups which it includes. It is, however, the nearest approach to this ideal which was possible and practicable under the existing conditions and limitations of the enumeration, classification, and presentation of occupations at the Thirteenth Census; and the use that has been and is being made of this table fully justifies this first attempt of the Bureau of the Census to classify and to present detailed statistics for each specific, elementary occupation in each important industry and service group in the United States.

As time passes, changes in the form of presentation of our occupation statistics doubtless should and will be made; but whatever changes are made, the present form of detailed classification, perhaps with some modifications, probably will be the basis for the classification ultimately used, for the demand is more and more for detail that can be presented only by some such form of classification. What is needed now is greater accuracy in enumeration, rather than material changes in classification.

One of the contemplated features of the occupation report which had to be abandoned because of a lack of time was a series of cross-classification reference numbers, showing which of the elementary occupations presented in the most detailed table (Table VI) were combined in each respective occupation group presented in the more condensed general tables of the report. This defect is largely remedied, however, by a classification of occupations, now published, showing which of the principal occupational designations returned by the census enumerators were included in each respective occupation group presented in the more condensed general tables of the report.

Mr. Knight considers it a "serious defect" that each occupation of the condensed list is classified in that part of the industrial field in which it is most commonly pursued, and says that "the result is frequently obscure, not to say misleading." In reply, I need only say that it would have been a far more "serious defect," and the result

would have been much more "frequently obscure" and "misleading" had each occupation of the condensed list been classified in some other part of the industrial field than that in which it is most commonly pursued. And in reply to his statement that "there is no key to what has been done," I will say that the general plan of combining the elementary occupations of Table VI into the larger occupation groups of the other general tables and of classifying these occupation groups under the different general divisions of the classification is adequately described on pages 24 and 25 of the report.

On page 186 of the review under consideration, the writer says:

"Most (but not all) of the 'trades' of the group are placed under Manufacturing and Mechanical Industries; some (draftsmen and designers) are included among the professions; and others (decorators, wheelwrights, mechanical engineers) are not to be found at all."

Now, the occupation of the draftsman or that of the designer resembles that of the artist (included with the professions) much more closely than it does that of the blacksmith or that of the carpenter (each placed under Manufacturing and Mechanical Industries); "wheelwrights" and "mechanical engineers" are "to be found"; and it is evident beyond question that all the various kinds of "decorators" could not properly be combined and presented as one occupation.

If by the statement that "the 'proprietary, official and supervisory' persons might be thought fairly to constitute an occupational class," and the reviewer means that these occupations should be erected into a separate class of occupations, as was done with clerical occupations, then I can only reply that to have done this in each of these cases and in each similar case would have been both impracticable and illogical. A clerk is a clerk, and a stenographer is a stenographer, wherever employed; and clerical occupations can hardly be said to be more peculiar to one general division of occupations than to another. But a farmer clearly belongs in agriculture, a manufacturer in manufacturing, and a merchant in trade; and to classify these persons otherwise would be quite illogical.

The suggestion of Mr. Knight that we have "at least the three gradations of occupied, partially occupied, and unoccupied" may be a good ideal for the future, but with the conditions of enumeration similar to those prevailing at any of our past censuses it is doubtful whether the suggestion has any present practical value. Our failure to collect satisfactory statistics of the number of months each employee was unemployed during the year shows that we would not be very successful in

attempting to learn whether each person was "occupied, partially occupied, or unoccupied." In fact, at each of the last three censuses, did we not attempt to secure much this same information for employees through the occupation and unemployment inquiries of the population schedule? Unfortunately, it is true, as Mr. Knight says and as was fully discussed in the report (pp. 26-29), that the statistics showing the number of women and children engaged in agricultural pursuits probably are quite inaccurate; but, inaccurate as they are, if studied carefully and used with discretion they are far from being "worthless," even as an indication of the number employed; and it is almost certain their accuracy would not have been increased by asking each woman and child the additional question as to whether she or it was "occupied, partially occupied, or unoccupied" during the year.

In conclusion, I wish to state frankly that I consider the occupation statistics in this country today rather crude and undeveloped in some respects. They are far from being what they should be and what, in time, they probably will be; but, both in accuracy and in form of presentation, the Thirteenth Census occupation statistics are so far in advance of those of the Twelfth Census that they are cause for hope rather than for despair, for optimism rather than for pessimism. For example, at the Twelfth Census all the religious and charity workers were classified and reported as "clergyman"; all the abstractors, notaries, and justices of the peace were classified and reported as "lawyers"; all the non-medical healers were classified and reported as "physicians and surgeons"; and all the machine-oilers were classified and reported as engineers and firemen (not locomotive)—nor in any case was the credulous user of these statistics warned as to the actual composition of the harmless looking occupation reported. Doubtless some mistakes of classification were made at the Thirteenth Census, but, as a rule, the occupations reported are what they appear to be. Our efforts should be toward further increasing the accuracy. In our detailed occupation statistics, we have now, as we have never had before, the basis for a real scientific study of the occupations of this country, and this study should be made before our next census. This and *better enumeration* are the things most needed.

ALBA M. EDWARDS.

ESTIMATED VALUATION OF NATIONAL WEALTH. The title of this recent United States Census bulletin appropriately makes conspicuous the word "estimated." That a figure of aggregate national wealth should be estimated, not ascertained, is inevitable. The summary classification for the country as a whole is shown in the following table:

Estimates of wealth for 1904 and 1912, with per cent increase in the 8-year period, and per cent distribution for each of these years.

Number of item	Form of wealth	1904		1912		Per cent increase 1904-1908
		Amount (millions)	Distributive per cent	Amount (millions)	Distributive per cent	
	Total	\$107,104	100.00	\$187,739	100.00	75.3
1	Real property and improvements taxed.....	55,310	51.83	98,363	52.39	77.2
2	Real property and improvements exempt.....	6,831	6.38	12,313	6.56	80.3
3	Live-stock	4,074	3.80	6,238	3.32	53.1
4	Farm implements and machinery	845	.79	1,368	.73	61.9
5	Manufacturing machinery, tools and implements.....	3,298	3.08	6,091	3.25	84.7
6	Gold and silver coin and bullion	1,999	1.87	2,617	1.39	30.9
7	Railroads and their equipment	11,245	10.50	16,149	8.60	43.6
	Street railways, etc.:					
8	Street railways	2,220	2.07	4,397	2.45	107.1
9	Telegraph systems	227	.21	223	.12	- 1.8
10	Telephone systems	586	.55	1,081	.58	84.6
11	Pullman cars not owned by railroads	123	.11	123	.07	.3
12	Shipping and canals	846	.79	1,491	.79	76.2
13	Irrigation enterprises	361	.19
14	Privately owned waterworks	275	.26	290	.15	5.5
15	Privately owned central electric light and power stations	563	.53	2,099	1.12	272.8
	All other:					
16	Agricultural products	1,899	1.77	5,240	2.79	175.9
17	Manufactured products	7,409	6.92	14,694	7.83	98.3
18	Imported merchandise	496	.46	827	.44	66.8
19	Mining products	403	.38	816	.43	99.9
20	Clothing and personal adornments	2,500	2.33	4,295	2.29	71.8
21	Furniture, carriages and kindred property	5,750	5.37	8,463	4.51	47.2

The method of arriving at these figures deserves consideration. The first and most important item is based upon the returns of local tax assessors, which are duly "equalized" at 100 per cent. The second is arrived at by assuming a nearly constant ratio to the first. The next three are chiefly the decennial census figures corrected for time. Coin and bullion are shown as regularly estimated by the Director of the Mint. Railroads are entered at the aggregate of their fixed-capital accounts less something for depreciation. This is crude as compared with the "commercial valuation" method of 1904. The important items under "Street railways, etc." are similarly treated, but in the case of street railways and electrical companies, at least, no allowance is made for depreciation. The last group of items, consisting mainly of consumption goods in the hands of dealers or consumers, are variously, and it appears rather arbitrarily, estimated by means of assumed ratios of the extant stock to recent production or importation. It would be better, but perhaps an impractical ideal, if all the data could be based upon inventoried number *times* unit cost, *less* depreciation. The writer sees no objection to the application of such a method to public streets and the like, which are omitted from the estimate.

The use of the term "valuation" in the title of the bulletin blunts a possible objection as to the character or significance of the pecuniary units by which the quantity of wealth is measured. But the question as to the importance of a change in the purchasing power of money is only the more definitely raised. The influence of an increasing population upon the valuation of land and other natural resources should be considered. The inference of the "man in the street" (including the man in Wall Street) from the aggregate pecuniary valuation of wealth to a corresponding quantity and increase of well-being or its means is not warranted.

According to the United States Bureau of Labor, wholesale prices for 1912 as compared with 1904 were in the ratio of 133.6 to 113.0, or 18.2 per cent higher. Retail prices were in the ratio of 154.2 to 116.2, or 32.7 per cent higher. But the valuation of wealth was 75 per cent greater.

The proportion of land value in the total can only be inferred from the proportion of taxed real property, for which the distributive per cent increased from 51.83 to 52.39. The figures warrant an inference stronger than may appear, because it is probably a general rule that the proportion of the value of improvements upon land to the value of the land with improvements decreases as the combined value per acre increases.

Even after allowing for such qualifications, it appears that there was an extraordinary increase of wealth, not merely of valuation, in the eight years. The *per capita* figure for 1904 (assuming 82,385,651 population) was \$1,300; that for 1912 was \$1,973. But an allowance for change in the price level occasions an increase of the former figure for comparison by perhaps 25 per cent, making it 1,625 dollars (?) per capita. According to this computation, the per capita per cent increase over 1904 was 21.4. This is sufficiently remarkable, but it is in large proportion due to an increase in the valuation of land and other natural gifts that have not meanwhile increased their potentialities for conferring benefits upon mankind. Some of this sort of increase is doubtless in turn due to more adequate occupation of national advantages, but more of it is of the nature of the increment in the value of the ground upon which New York City is built.

The reviewer leaves his task with a strengthened feeling that economic statistics must be as much economics, even theoretical economics, as statistics. It would do no harm for the Census Bureau to make its theories explicit. But if one would find fault with the present bulletin, it should rather be on the ground that the amount of estimation by way of rough ratios, of such a nature as the private statistician might be expected to employ, seems unduly large in these 1912 figures and larger than in 1904. Each succeeding census estimate should have more the character of an actual inventory.

G. P. WATKINS.

The federal Bureau of Labor Statistics in Bulletin No. 156, *Retail Prices 1907 to December, 1914* (Washington, Mar., 1915, pp. 397) in Appendix A gives an explanation of the new method of computing retail prices and index numbers and the reasons which have led to the discarding of old methods of computation.

Report No. 3 of the Department of Investigation and Statistics of the Industrial Commission of Ohio deals with *Statistics of Mines and Quarries in Ohio, 1913*. Formerly the data here included were published in the annual reports of the chief inspector of mines. Greater emphasis is now given to statistics of injuries.

Charles F. Gettemy, director of the Massachusetts Bureau of Statistics, has prepared a pamphlet on *The Massachusetts Bureau of Statistics, 1869-1915. A Sketch of its History, Organization and Functions together with a List of its Publications and Illustrative Charts* for the Massachusetts Panama-Pacific Exposition Commission (Boston, pp. 115). The charts are of special interest.

PERIODICALS

The REVIEW is indebted to Robert F. Foerster for abstracts of articles in Italian periodicals, and to R. S. Saby for abstracts of articles in Danish and Swedish periodicals.

Economic History, United States

(Abstracts by E. L. Bogart)

ALLIN, C. D. *Colonial aspects of the war.* Mid-West Mag., May, 1915.

BUCHANAN, C. M. *Rights of the Puget Sound Indians to game and fish.* Wash. Hist. Quart., Apr., 1915. Pp. 10.

Shows how the treaty rights of the Indians have been invaded.

DANIELS, W. *Steamboating on the Ohio and Mississippi before the war.* Ind. Mag. of Hist., June, 1915. Pp. 30.

An interesting account by an old river pilot.

FEHLINGER, H. *Volk und Wirtschaft in den Vereinigten Staaten von Amerika.* II. Zeitschr. f. Socialwis., Apr., 1915. Pp. 12.

The first article dealt with the population; this, with agriculture and manufactures.

FULLER, G. N. *Settlement of Michigan territory.* Miss. Valley Hist. Rev., June, 1915. Pp. 31.

Describes economic conditions as well as political organization.

GLASSON, W. H. *Some effects of the European war upon American industries.* S. Atlantic Quart., Apr., 1915. Pp. 15.

Deals with the foreign trade of the United States, especially in cotton.

GOLDENWEISER, A. A. *The social organizations of the Indians of North America.* Journ. Am. Folk-Lore, Dec., 1914. Pp. 26.

HULBERT, A. B. *The methods and operations of the Scioto group of speculators.* Miss. Valley Hist. Rev., June, 1915. Pp. 18.

The second instalment, showing speculative and even fraudulent methods.

RIDGELEY, H. W. *Seafaring in time of war, 1756-1763.* Md. Hist. Mag., Mar., 1915. Pp. 15.

Letters and documents concerning Maryland shipowners, with comments.

STONE, A. H. *The cotton factorage system of the Southern States.* Am. Hist. Rev., Apr., 1915. Pp. 10.

An account of the marketing of cotton in the ante bellum period through the factor or home agent of the planter.

TRIMBLE, W. J. *Agrarian history of the United States as a field for research.* Hist. Teacher's Mag., May, 1915. Pp. 3.

Urges a study of agricultural history.

VAN DER ZEE, J. *The half-breed tract*. Iowa Journ. Hist. & Pol., Apr., 1915.

Account of the overrunning by white settlers of a tract reserved by treaty to half-breed Indians.

VAN DER ZEE, J. *The oldest land titles in the State of Iowa*. Iowa Journ. Hist. & Pol., Apr., 1915. Pp. 12.

Account of the the Riddich title to the Montrose lands, 1799-1864.

The first coal mining company of the Lehigh region. Penn. Mag. Hist. & Biog., Apr., 1915. Pp. 6.

An account of the Lehigh Coal Mine Company.

The Indians of Iowa in 1842. Iowa Journ. Hist. & Pol., Apr., 1915. Pp. 15.

Reprints of reports by Quakers of conditions among the Indians in Iowa.

Social legislation. Survey, June 12, 1915. Pp. 5.

Review of social legislation in 9 states for 1915; 12 other states were reviewed in a previous article.

Virginia in 1677-1678. Va. Mag. Hist. & Biog., Apr., 1915. Pp. 10.

Extracts from colonial papers.

Economic History, Foreign

(Abstracts by Clive Day)

ANDREWS, C. M. *Anglo-French commercial rivalry, 1700-1750; the Western phase*. I, II. Am. Hist. Rev., Apr., July, 1915. Pp. 18, 20.

I. An analysis, by place and ware, of the American commerce for which English and French competed. Rich in extracts from contemporary pamphlets. II. The colonial policy of the two countries, especially as it related to the sugar trade.

BROWN, G. B. *Report on home industries in Scotland*. Econ. Journ., June, 1915. Pp. 12.

Summary of parliamentary report by W. R. Scott, recently elected to the Adam Smith chair at Glasgow. Covers chiefly tweeds, hosiery, and kelp.

COHN, E. *Die ökonomischen Verhältnisse Dänemarks unter dem Einfluss des Krieges*. Wirtsch. Archiv, Apr., 1915. Pp. 20.

Finance, credit, prices, and production.

CRAMMOND, E. *The cost of the war*. Journ. Royal Stat. Soc., May, 1915. Pp. 52.

Estimates a total cost of £9,337,900,000 for the first 12 months, divided fairly evenly between the two groups of belligerents, including direct expenditures of governments, destruction of property, capitalized value of loss of life, and other losses.

DANIELS, G. W. *Early records of a Manchester cotton spinning firm*. Econ. Journ., June, 1915. Pp. 13.

Important material from business books and correspondence, illustrating the business and organization of a cotton factory, 1795-1815.

DURAND, C. *La situation économique de la Russie à la fin de 1914*. L'Econ. Franç., June 12, 1915. Pp. 2.

GRUNTZEL, J. *Oesterreichs Volkswirtschaft im Kriege*. Wirtsch. Archiv, Apr., 1915. Pp. 14.

Credit, production, consumption, and policy.

ISAACS, N. *The merchant and his law*. Journ. Pol. Econ., June, 1915. Pp. 32.

A substantial and interesting essay on "business law," tracing its history and discussing its place in the curriculum of colleges of commerce.

SARTORIUS VON WALTERSHAUSEN, A. *Weltwirtschaft und Weltkrieg*. Wirtsch. Archiv, Apr., 1915. Pp. 25.

An economic and political survey and forecast from the German standpoint.

STEEL-MAITLAND, A. *The economic strain on England and on Germany: a comparison*. Nineteenth Cent., June, 1915.

Lettre d'Egypte: la fécondité de l'Egypte et l'irrigation. L'Econ. Franç., May, 1915. Pp. 3.

La situation économique de la France: les signes d'amélioration graduelle. L'Econ. Franç., Apr. 24, 1915. Pp. 2.

Rückblicke und Ausblicke in der Kriegsernährungswirtschaft. Soz. Praxis, May 20, 1915. Pp. 3.

Economic Geography

BIRKINBINE, J. *Iron a factor in the world's progress*. Journ. Franklin Inst., Apr., 1915.

INGALLSBE, F. R. *Notes on national forestry in Montana*. Journ. Assoc. Engg. Soc., May, 1915.

ROSS, W. G. *Reclamation of low-lying lands along the Mississippi*. Stone & Webster Pub. Serv. Journ., June, 1915.

WILSON, W. *Hydro-electric power in New Zealand*. Engg. Mag., June, 1915.

The coal industry of the United States in 1914. Min. & Engg. Wld., Feb. 6, 1915.

Irrigation pumping in the coast states. Elec. Wld., May 29, 1915.

World's copper industry in 1914. Min. & Engg. Wld., Feb. 6, 1915.

Agricultural Economics

(Abstracts by John Lee Coulter)

BALLOD, C. *Die Kartoffelfrage*. Soz. Praxis, Mar., 1915. Pp. 4.

Review of exact status and policy suggested during the crop year of 1915.

CLEEF, E. V. *The sugar beet in Germany, with special attention to its relation to climate*. Bull. Am. Geog. Soc., Apr., May, 1915. Pp. 17, 7.

Historical and analytical with full maps, charts, statistical tables, and illustrations.

DOHERTY, T. K. *Coöperative legislation in Canada*. Mo. Bull. Econ. & Soc. Intell., Dec., 1914.

Separate treatment for dairy and other types for each province.

DOUGLAS, A. W. *The land factor in food cost*. Annalist, May 10, 1915. Pp. 2.

Challenge to the theory that high price of land contributes to high cost of living, with tables and charts.

HOLMAN, C. W. *The tenant farmer, country brother of the casual worker*. Survey, Apr. 17, 1915. Pp. 2.

Concrete review of a situation in Texas, with illustrations.

NEW, H. P. *The Indiana rural loan law*. Am. Bldg. Assoc. News, Apr., 1915. Pp. 5.

Review of legislation and formation of credit associations as result of same.

NOYCE, F. *Land revenue administration and tenures in British India*. Mo. Bull. Econ. & Soc. Intell., Nov., Dec., 1914. Pp. 15, 14.

Tenancy legislation and practice; land revenue systems with bibliography and statistical tables. Each province separately considered.

TALBOT, E. H. *A new agricultural empire*. Moody's Mag., Feb., 1915. Pp. 8.

How non-irrigated farming has been successfully tested in the West. A study of the Campbell system of dry farming.

WAITE, M. B. *The importance of research as a means of increasing agricultural production*. Ann. Am. Acad., May, 1915.

Many concrete illustrations from chemistry, zoölogy, entomology. *Agricultural coöperation in Austria during the first five months of war*. Mo. Bull. Econ. & Soc. Intell., Dec., 1914. Pp. 8.

Separate review of experience of each type of coöperation.

Agricultural efforts in France during six months of war (August, 1914-January, 1915). Mo. Bull. Econ. & Soc. Intell., May, 1915. Pp. 15.

Analysis of farm labor supply, measures taken, meat, sugar beets, etc.

The agricultural needs of the United States. Mo. Bull. Econ. & Soc. Intell., Mar., 1915. Pp. 10.

Review of Part 3, Senate Document No. 214, being part of report of American Commission on Coöperation and Rural Credits.

Can Germany be starved out? Annalist, Mar. 1, 1915. Pp. 2.

Brief analysis from special correspondent.

The cattle industry in Columbia and its possibilities. Bull. Pan. Am. Union, Feb., 1915. Pp. 10.

Official statement prepared by the Columbian Information Bureau. Detailed authoritative statistical treatment.

Contemporary agricultural policy in Austria. Land operations, according to

state and provincial law. Mo. Bull. Econ. & Soc. Intell., Mar., 1915. Pp. 18.

Detailed review of land operations with full statistical tables.

The economic results of home colonization in Siberia. Mo. Bull. Econ. & Soc. Intell., May, 1915. Pp. 18.

Study of farm life in old Russia and Siberia.

Estimated on farms and value of domestic animals (tables). Farmers' Bull., Feb. 6, 1915. Pp. 5.

Farmers' elevators in the North Central states. Mo. Bull. Econ. & Soc. Intell., Mar., 1915. Pp. 13.

Careful review of movement with bibliography.

Hawaiian sugar men testify regarding contracts with planters before Committee of Agriculture of the House of Representatives. Sugar, May, 1915. Pp. 3.

Many details quoted and testimony interpreted.

The land and agricultural bank in 1913. Mo. Bull. Econ. & Soc. Intell., Apr., 1915. Pp. 8.

Experience in Union of South Africa.

Landschaft of the Province of Saxony. Mo. Bull. Econ. & Soc. Intell., Jan., 1915.

A 50-year review of origin, growth and present status.

Maximum food prices. Annalist, May 17, 1915. Pp. 2.

A review of experience in Germany and Holland and statement of situation in France and Great Britain.

The movement for agricultural credit in the United States. Mo. Bull. Econ. & Soc. Intell., Nov., 1914.

Brief summary of movement in the United States up to about July, 1914.

Periodical migrations of agricultural laborers. Mo. Bull. Econ. & Soc. Intell., Apr., 1915. Pp. 9.

Detailed review of situation in Italy in 1912.

Commerce

(Abstracts by M. T. Copeland)

BARNEY, W. J. *The modern terminal port.* Ann. Am. Acad., May, 1915.

Brief exposition of the principles of terminal and port planning.

BISHOP, A. L. *Commercial attachés and foreign trade.* Am. Econ. Rev., June, 1915. Pp. 11.

CAMPBELL, H. H. *The steel industry and export trade.* Engg. Mag., May, 1915.

Attempt to justify "dumping," because of inelasticity of domestic demand and economies of continuous operation.

CHAPMAN, S. J. and KEMP, D. *The war and the textile industries (with discussion).* Journ. Royal Stat. Soc., Mar., 1915.

Attempt to determine by a very suggestive analysis of statistical indices the extent to which depression in English cotton industry was accentuated by war.

CROHN, H. F. *Argentinien im deutsch-englischen Wirtschaftskampf*. Schmoller's Jahrb., 39, 2, 1915.

Relative influence of England in Argentine, where tremendous commercial struggle between England and Germany will center after end of war.

DUREAU, G. *Nos colonies à sucre et la guerre de 1914*. Journ. des Econ., Mar., 1915.

Despite obstacles, production of sugar in French colonies will probably increase.

HESS, R. H. *The waterways and commercial evolution*. Ann. Am. Acad., May, 1915.

Waterways should be developed as secondary means of transportation.

HOFFMANN, I. N. *The cotton futures act*. Journ. Pol. Econ., May, 1915.

Conditions which led to its enactment; benefits; amendment needed.

HOWE, F. C. *The free port an agency for the development of American commerce*. Ann. Am. Acad., May, 1915.

Establishment of free ports highly desirable.

JACOBS, P. *Der Englische Handelskrieg gegen Deutschland*. Schmoller's Jahrb., 39, 2, 1915.

England's efforts to injure German trade; retaliatory measures of Germany.

KEIR, R. M. *The resources of United States and their relation to opportunity*. Ann. Am. Acad., May, 1915.

General comparisons without noteworthy acumen.

KELLER, K. *Ein deutsch-oesterreich ungarischer Zollverein?* Schmoller's Jahrb., 39, 2, 1915.

Highly desirable; obstacles not insuperable.

LITTLE, A. D. *The dyestuff situation*. Sci. Am., Sup., May 1, 1915.

MARTIN, S. O. *The scientific study of marketing*. Ann. Am. Acad., May, 1915.

Progress which has been made in the study of the principles of marketing.

NORTON, T. H. *Can we be independent of German dyestuffs?* Nation's Business, June 15, 1915.

Distinct progress has been made; the one obstacle to further development is fear of price-cutting by German cartel.

OPPEL, A. *Der Baumwollhandel in Bremen*. Weltwirtsch. Archiv, Apr. 1915.

Development of its organization.

PATTERSON, E. M. *Coöperation among grocers in Philadelphia*. Am. Econ. Rev., June, 1915. Pp. 15.

PAYEN, E. *Le cacao. Sa consommation et ses prix.* L'Econ. Franç., Apr. 10, 1915.

Brief survey of world's cocoa trade.

PAYEN, E. *L'Uruguay: sa situation économique et financière.* L'Econ. Franç., May 8, 1915. Pp. 2.

A brief summary of economic and financial conditions in Uruguay, emphasizing her important trade relations with France.

PEPPER, C. M. *South American markets.* Ann. Am. Acad., May, 1915.

PITTS, H. B. *Commercial practices in California.* Elec. Wld., May 29, 1915.

Sales organization of the Pacific Gas and Electric company.

PRATT, E. E. *The attitude of business towards foreign trade.* Ann. Am. Acad., May, 1915.

Opportunities and advantages in foreign trade.

SAUNDERS, W. L. *Some practical considerations in foreign business.* Americas, June, 1915.

Foreign branches most advantageous; this requires large capital and variety of products; hence small manufacturers should be permitted to combine for export trade.

USHER, A. P. *The technique of mediaeval and modern produce markets.* Journ. Pol. Econ., Apr., 1915.

Elements of organized speculation and their early manifestation. *American merchant marine.* Sup., Mo. Bull. N. Y. Chamber Com., Jan., 1915.

Criticism of ship purchase bill and discussion of alternative plan of guaranteeing ship mortgages.

Brazil. U. S. Com. Repts., May 12, 1915.

Detailed statistical report on foreign trade of Brazil in 1914.

Bulletin of the American Institute of Banking. Journ. Am. Bankers Assoc., May, 1915.

Significance of our "favorable" balance of trade; opportunities for American bankers.

Commercial benefits arising from "free ports." Greater N. Y., June 21, 1915.

Foreign experience indicates advantages which would accrue to New York from establishment of a "free port."

The customer's rebate. Annalist, May, 1915.

Reasons for opposition to trading stamps and profit-sharing coupons.

The international movement of fertilizer. Mo. Bull. Agr. Intell., Mar., 1915.

Production trade statistics; comprehensive bibliography.

Pan American financial conference. Nation's Business, June 15, 1915.

Reports of committees and review of trade data furnished by Latin-Americans.

A place in the sun. Annalist, Apr. 26, 1915.

Comparison of growth of foreign trade of Germany, England, France, and United States since 1875.

A review of Russia's foreign trade. Americas, Apr., 1915.

Largely statistical.

Seeking trade at the source. Annalist, June 21, 1915.

Standard Oil Company's methods of training salesmen.

The war and our chemical industries. Journ. of Ind. & Engg. Chem., Jan., 1915.

Symposium, with special reference to effects on heavy chemical industries.

War orders and American industry. Engg. Mag., July, 1915. Pp. 7.

Summary of opinions of several manufacturers.

Railways

(Abstracts by Julius H. Parmelee)

ALBERS, F. *Die Eisenbahn in Kriege.* Beamten-Jahrb., Dec., 1914. Pp. 3.

Vital work accomplished by German railways in the present war.

ALLIX, G. *Les resultats de 1914.* I. Réseau d'Orléans. II. Réseau de l'Est. Journ. des Transports, Apr. 3, 24, 1915. Pp. 5, 5.

Series of statistical analyses of the operations of the principal French railways during 1914. Decreased receipts and greatly decreased net revenue.

ALLIX, G. *La sécurité des transports commerciaux.* Journ. des Transports, Feb. 27, 1915. Pp. 4.

Regulations intended to accelerate the return of the French railways to normal conditions and to relieve them of responsibility for losses or delays due solely to the exigencies of the military situation.

BALLAINE, J. E. *Alaska's government railroad.* Rev. Rev., May, 1915. Pp. 5.

Resources of Alaska as they will be tapped by the projected government road.

BALLANTINE, N. D. *The real value of a freight locomotive.* Ry. Age Gaz., Apr. 23, 1915. Pp. 4.

Suggests improved efficiency methods in handling locomotives.

BAUER, J. *Returns on public service properties.* Pol. Sci. Quart., Mar., 1915. Pp. 28.

Reasonable changes discussed from viewpoint of public service corporation. Suggested as a factor in railway regulation and rate-making that profits above a fixed maximum be appropriated, either wholly or in part, for public purposes.

BAUER, J. *Valuation of public service properties.* Pol. Sci. Quart., June, 1915. Pp. 23.

Argues for actual-cost, in preference to cost-of-reproduction method of valuation.

BRADSHAW, G. *Practical methods in accident prevention.* Ry. Wld., May, 1915. Pp. 4.

Emphasizes necessity of active coöperation on part of railway employees.

BRADSHAW, G. *Some of the more important railway associations: their history and purposes.* Ry. Wld., Mar., 1915. Pp. 3.

BROOKE, G. D. *How the operation of one terminal was improved.* Ry. Age Gaz., May 28, 1915. Pp. 4.

Scientific methods applied to the organization of a large terminal.

BURLESON, A. S. *How should railroads be paid for carrying mail?* Nation's Business, May 15, 1915.

The Post Office Department point of view. Contends that the railways "are receiving ample pay for the service performed."

CLARK, G. A. *A recent development in railroad finance.* Ry. Age Gaz., June 18, 1915. Pp. 3.

The rise of the blanket mortgage.

CODE, J. G. *Federal regulation of railroads.* Ry. Age Gaz., June 11, 1915.

Suggests districting the United States and assigning an interstate commerce commissioner (or a sub-commissioner) to each district.

COOK, W. W. *A plan for the nationalization of railroads.* Yale Law Journ., Mar., 1915. Pp. 11.

Advocates nationalization by means of a holding company, or companies, controlled by the public.

CORDEAL, E. *Cost accounting in the railroad repair shop. The expert in the railroad repair shop.* Engg. Mag., June, 1915. Pp. 7, 6.

Final articles in a series dealing with economy in railway shop operation.

CUMMINS, A. B. *Reasons for the full liability law.* Trade & Transportation, Apr., 1915. Pp. 2.

Statement of origin and purpose of the so-called Cummins amendment, prohibiting carriers from limiting their liability for property destroyed or damaged in transit.

ESHLEMAN, J. M. *What determines the "fair value" of a public utility property.* Case & Comment, Apr., 1915. Pp. 6.

Value is determinable only by the "sacrifice made by the owners of the property in view of all the facts."

FORD, F. S. *The necessity for a national railroad organization.* Ry. Wld., May, 1915. Pp. 2.

Advocates the elimination of competition by means of "organized coöperation."

GAINES, F. F. *A discussion of the factors involved in increasing tonnage per locomotive mile.* Railroad Herald, Jan., Feb., Mar., Apr., June, 1915.

An efficiency series.

GAINES, M. W. *A billion dollar confiscation.* Ry. Age Gaz., June 4, 1915.

Characterizes depreciation regulations of Interstate Commerce Commission as a double burden on the present generation of railway security holders.

GIBBS, G. and others. *Operating results of the electrification of steam railroads.* Western Soc. of Engg., Journ., Apr., 1915. Pp. 31.

Technical discussions of electrification on the Norfolk and Western, Pennsylvania, New York Central, New Haven, and St. Paul roads.

GILLETTE, H. P. *Some important considerations in right of way valuation.* Ry. Age Gaz., June 25, 1915. Pp. 2.

Discussion of various principles governing the selection of right-of-way multiples.

GRIMSHAW, R. *War capacity of United States railways.* Sci. Am., May 1, 1915. Pp. 2.

Statistics of the transportation requirements of an American field army. Concludes that our railway equipment is ample for the demands of war.

GUILFORD, P. *A plea for the better illumination of passenger coaches.* Ry. Surgical Journ., June, 1915. Pp. 5.

Paper by the official oculist of an American railway on the responsibility of the railway for proper car illumination.

HALEY, F. M. *Railway expansion in Central America. I. Costa Rica, Nicaragua, and Salvador. II. Honduras.* Moody's Mag., May, June, 1915. Pp. 4, 2.

A brief descriptive and historical series.

HATCH, M. C. M. *Fuel economy in railroad service.* Ry. Age Gaz. (Mech. Ed.), May, 1915. Pp. 5.

An analysis of seven general factors affecting fuel consumption: locomotive design, maintenance, engine house attention, fuel, operating department organization, engineers, firemen.

HENDERSON, G. R. *Recent developments in locomotives.* Pro. N. Y. Railroad Club, Apr. 16, 1915. Pp. 8.

Increased power and increased economy in fuel and labor.

HIATT, W. S. *The battle of the Marne.* Ry. Age Gaz., July 2, 1915. Pp. 3.

Heroic work by the railways the saving element in damming the German flood before Paris.

HIATT, W. S. *France saved by her railroad men.* Ry. Age Gaz., May 21, 1915. Pp. 2.

The service rendered by the French railways in war time.

HICKERNELL, W. F. *Rehabilitating railroad credit.* Moody's Mag., June, 1915. Pp. 2.

Suggests several possible methods.

HOSSAIN, S. *Turkey and German capitalists.* Contemp. Rev., Apr., 1915. Pp. 8.

The diplomatic and commercial aspects of railway development in Turkey.

HOVEY, R. LE C. *Railroad wages and taxation.* Annalist, Apr. 26, 1915. P. 1.

Recent increases in the wage and tax factors of transportation cost.

HUNGERFORD, E. *Railroad advertising*. Ry. Age Gaz., May 14, 1915. Pp. 3.

Commends to the railways the utilization of large-scale advertising as an aid in the solution of railway problems.

JENNINGS, H. J. *Home railroads during the war*. Nineteenth Cent., Apr., 1915. Pp. 14.

The agreement between the British government and the railways, and its effect on railway traffic, operation, and finances.

KENDALL, W. C. *Economical handling of freight cars*. Pro. N. E. Railroad Club, Apr. 13, 1915. Pp. 15.

LAVIS, F. *The rivers and railroads in the United States*. Ry. Age Gaz., May 7, 1915. Pp. 2.

Emphasizes fallacy of ignoring interest on investment and cost of administration and maintenance when calculating total transportation cost via canalized waterways.

LAWSON, W. R. *The future of British railways*. Finan. Rev. Rev., June, 1915. Pp. 14.

Pessimistic analysis of labor difficulties, rate problems, and financial worries that will face British railway officials after the war.

LOGAN, T. F. *Running railroads by water power*. Sci. Am., June 19, 1915. Pp. 2.

Hydro-electric power as an element in conservation of natural resources.

MACPHERSON, D. *New Canadian national transcontinental railway*. Scribner's Mag., May, 1915. Pp. 20.

Popular description of new railway line from coast to coast, to be operated as the Grand Trunk Pacific Railway. With map.

MERTENS. *Zur Geschichte des Eisenbahntarifwesens in Russland*. Archiv f. Eisenbahnw., Mar.-Apr., 1915. Pp. 12.

Development of the Russian railway rate system and its organization.

MITCHEL, J. P. *Transportation, port and terminal facilities*. Pro. N. Y. Acad. Pol. Sci., Apr., 1915. Pp. 15.

Future development of New York City's railway and water terminal facilities.

MOYNIHAN, J. J. *Freight car efficiency*. Traffic Wld., June 12, 1915. Pp. 2.

NECYS, H. *L'exploitation des chemins de fer par l'Etat*. Rev. Sci. Pol., July-Aug., 1914. Pp. 40.

A pessimistic review of the acquisition and operation of the western railway of France by the government.

PARMELEE, J. H. *Statistics of English railways in war time*. Ry. Age Gaz., June 11, 1915. P. 1.

Virtual nationalization of railways, and unsatisfactory nature of their annual reports.

PARSONS, W. B. *An American engineer in China*. Journ. Franklin Inst., Apr., 1915. Pp. 33.

Illustrated article on primitive transportation methods in China and future prospects.

PESCHAUD, M. *Les effets de la guerre sur le budget de la Suisse et sur la situation financière des chemins de fer fédéraux.* Rev. Pol. & Parl., Feb. 10, 1915. Pp. 12.

Exceptional measures taken by the Swiss government to equilibrate the national finances and the budget of the federal railway system.

PETERS, R. *The case for the railroads in the carrying of the mails.* Nation's Business, May 15, 1915.

The railway point of view: asks for annual weighings, relief from messenger services, and pro-rata payment for apartment mail cars.

PRINCE, T. *The Missouri, Kansas and Texas railway.* Moody's Mag., Apr., 1915. Pp. 9.

Analysis of financial status of the system, and possible ways out of its difficulties.

RICHARDS, R. C. *Railway accidents and "safety first."* Journ. Pol. Econ., Jan., 1915. Pp. 12.

The "safety first" movement as originated on the Chicago & Northwestern, and its practical results.

RICHARDS, R. C. *The "safety first" movement.* Ry. Surgical Journ., Apr., 1915.

Description of safety methods employed by the Chicago & Northwestern Railway.

ROBERTS, J. W. *The measurement of efficiency in yard operation.* Ry. Age Gaz., June 11, 1915. Pp. 2.

SCHIELLE, G. *L'autonomie des chemins de fer de l'état belge.* Journ. des Econ., Mar., 1915.

Historical review of the Belgian state railway system, the oldest state railway in the world.

SMITH, H. G. *The value of railways in time of war.* Ry. News (London), May 15, 1915. Pp. 2.

SPRINGER, J. F. *Wireless telephone in railway service.* Ry. & Locomotive Engg., Apr., 1915. Pp. 2.

Description of experiments and apparatus on the Lackawanna.

STEALY, J. H. *Psychology of railroad accidents.* Ry. Surgical Journ., Apr., 1915. Pp. 7.

How the subtle suggestions made to victims of a slight railway accident often transforms them into professional malingerers.

SURVEYER, A. *La réglementation des services publics par les commissions.* Rev. Trl. Canadienne, May, 1915. Pp. 14.

Development of commission control, with especial reference to the United States and physical valuation.

THIRWALL, J. C. *The jitney problem.* General Elec. Rev., July, 1915. Pp. 11.

Describes the growth of the jitney in a number of cities and its effect on electric railway transportation; and recommends improved service as the best means of meeting the competition.

TUCKER, R. H. *An application of cost accounting in rate-making.* Journ. Pol. Econ., June, 1915. Pp. 14.

For the most part an analysis of the Minnesota and Wisconsin express rate cases.

WILLIS, H. P. *Aspects of the financial problem of the railways.* Ry. Age Gaz., May 14, 1915. Pp. 4.

Operation of the Federal Reserve Act, and effect on need of the railways for new capital.

WILSON, H. R. *British railway accidents.* Engg. News, Mar. 4, 1915.

In spite of heavy demands on the railway organization due to war conditions, only six passengers on British railways lost their lives in 1914 in train accidents.

Architectural beauty in the civic gateway of to-day. Craftsman, Apr., 1915.
Illustrated article on railway terminals.

Australia's transcontinental railway. Ry. News (London), June 5, 1915.

Road will connect West Australia, South Australia, Victoria, and New South Wales. Work was commenced in 1912.

Award: Arbitration between the Western railroads and Brotherhood of Locomotive Engineers and Brotherhood of Locomotive Firemen and Engineers. Apr. 30, 1915. Pp. 32.

Award by board appointed under Newlands act affects nearly 100 Western roads and about 65,000 enginemen and firemen. Rates of pay are advanced for certain classes, working rules are revised, and weight of engine on drivers is established as the basis of compensation. Final result of award, in dollars of added wages per year, can not be determined without experimental study.

Decision in re the Cummins amendment. Decision on lake line applications under Panama Canal Act. Interstate Commerce Commission, May 7, 1915.

The Cummins amendment, forbidding common carriers to limit their liability for the carriage of goods, does not automatically allow carriers to increase their rates.

Refuses the petition of certain Eastern railways to retain control of their Great Lakes boat lines, on the ground that they compete with the lake lines either directly (by rail routes paralleling the water routes) or indirectly (by through rail agreements with other railways).

The domain of the efficiency expert. Ry. Rev., May 8, 1915. Pp. 3.

A critique of the "theoretical expert."

An effective freight claim preventive crusade. Ry. Age Gaz., Apr. 9, 16, 23, 1915. Pp. 13.

The campaign on the Frisco to prevent loss and damage to freight has resulted in cutting damage claims nearly in two.

Effects of train limit legislation. Ry. Age Gaz., May 7, 1915. Pp. 2.

Argues that the attempt to limit length of freight trains reduces the factor of safety in railway transportation.

Fundamental problems involved in railway valuation. Ry. Age Gaz., June 4, 1915. Pp. 5.

Report of conference held at Washington in May, attended by representatives of federal and state railway commissions and of the railways, to discuss details of the physical valuation work.

A history of mail pay. Annalist, Apr. 19, 1915. Pp. 2.

James J. Hill professorship of transportation. Ry. Age Gaz., July 2, 1915.

A new foundation, provided largely by railway officials and other friends of Mr. Hill.

Magnitude and stability of electric railway earnings. Com. & Finan. Chron., Apr. 17, 1915. Pp. 6.

The year 1914 a good one in the electric railway world, despite unfavorable conditions elsewhere.

Necessity for additional revenues on Western railways. Ry. Age Gaz., June 18, 1915. Pp. 4.

Abstract of brief submitted by C. C. Wright of railway counsel in Western Freight Rate Advance case.

New railroad legislation in fifteen states. Ry. Age Gaz., July 2, 1915. Pp. 3.

Abstract of state laws affecting railways passed during the legislative sessions of 1915.

Nineteen years' development work on the Santa Fe. Ry. Age Gaz., June 18, 1915. Pp. 4, 4.

A two-part series on the growth of the Santa Fe since the termination of its receivership in 1896.

The Norfolk & Western electrification. Elec. Ry. Journ., June 5, 1915. Pp. 12.

First case on record of a high power electric locomotive supplanting the steam Mallet.

Passenger fares and travel on the Continent. IX. Sweden. Ry. Gaz. (London), Apr. 30, 1915. Pp. 2.

Preparing for the federal valuation of the railways. Ry. Age Gaz., May 28, 1915. Pp. 3.

Description of organizations created by a number of railways to collect valuation data.

Public hearing on Pullman employees (digest of testimony). U. S. Commission on Industrial Relations, Apr. 6-16, 1915. Pp. 66.

Railroad securities held abroad. Ry. Age Gaz., July 2, 1915. Pp. 2.

Abstract of a compilation by L. F. Loree, who estimates American railway securities held abroad at two and a half billions, par value.

The railway exhibit at the Panama-Pacific international exposition. Ry. Rev., May 22, 29, 1915. Pp. 4, 3.

A descriptive series of editorial letters.

Railway statistics. Archiv f. Eisenbahnw., Mar.-Apr., May-June, 1915.

Prussia-Hesse 1913; Italy (state railways), 1912, 1913. Alsace-Lorraine, 1913.

Railwaymen and enlistment: employment of women. Ry. News (London), Apr. 3, 1915. P. 1.

A receivership in the making. Annalist, June 14, 1915. Pp. 2.

The circumstances surrounding the Rock Island receivership.

Reclamation of scrap on the Great Northern. Ry. Age Gaz., May 7, 1915.

Scientific management applied to the salvage of wrought iron scrap.

The struggle for the railways of Manchuria. Far East. Rev., Mar., 1915.

The military and diplomatic moves by which Japan ousted Russia from dominance in South Manchuria.

Telephone and telegraph statistics of the world. Am. Tel. and Tel. Co. Bull. No. 4, May, 1915. Pp. 7.

The second of an annual series of bulletins. Total number of telephones in use on January 1, 1914, throughout the world is estimated at nearly 15 million, of which the United States has nearly two thirds.

Transportation bulletin. Bureau of Applied Economics, Bull. No. 1, May 15, 1915. Pp. 12.

Digest of current railway finances, accident statistics, judicial decisions, etc.

Transportation in Chicago during a traction strike. Ry. Age Gaz., June 25, 1915. Pp. 6.

The record of the steam railways in handling five times their normal passenger traffic during the 3-day traction strike in June 1915, without accident.

Transportation on land and sea. Sci. Am., June 5, 1916. Pp. 6.

Developments in ocean and railway travel since 1845 with particular reference to size of locomotives and other equipment, safety devices, electrical mechanism, etc.

The value of the old man. Ry. Rev., June 2, 1915. Pp. 3.

A plea for the mature man over forty in the railway organization.

The war bonus: Revised agreement between the government and the railways. Ry. News (London), Apr. 17, 1915. P. 1.

By a new arrangement with the railways, the British government will pay only three fourths of the war bonus granted to railway employees, at the same time agreeing to make up to the railways all losses in net revenues, as compared with normal conditions.

What the railroads can do to promote foreign trade. Americas, Apr., 1915. Pp. 6.

A plea for properly regulated rate concessions to export trade.

Women and railway work. Ry. News (London), Apr. 17, 1915. Pp. 3.

Utilization of women on the British railways as clerks, ticket collectors and examiners, dining-car attendants, porters, messengers, etc.

Die Eisenbahnen Deutschlands, Englands und Frankreichs in den Jahre 1909 bis 1911. Archiv f. Eisenbahnw., May-June, 1915. Pp. 30.

Statistical comparison of railway operations and railway progress in Germany, England, and France.

Die Eisenbahnen der Erde. Archiv f. Eisenbahnw., May-June, 1915. Pp. 15.

Statistics of world railways: mileage, capital, ownership and control, etc., down to 1913.

Accounting

(Abstracts by Martin J. Shugrue)

ALLEN, L. H. *Accounts for material on engineering construction.* Journ. Account., May, 1915. Pp. 6.

Accounting for the cost of materials used and subcontracts made in construction work.

ALLISON, J. E. *Rate of return.* Stone & Webster Pub. Serv. Journ., Apr., 1915. Pp. 12.

So far as regulation is concerned questions of valuation and of rate of return can not be separated. The correct regulation of present rate of return is the ascertainment of the rate at which competitive capital would take the place of capital already serving the public.

ALVORD, J. W. *Fundamental principles of public utility valuation.* Pro. Am. Soc. Civil Engrs., May, 1915. Pp. 15.

Author's closure of paper continued from February, 1915, *Proceedings*.

BAUER, J. *Depreciation and rate control: a question of justice.* Quart. Journ. Econ., May, 1915. Pp. 8.

A criticism of "depreciation and rate-control," by A. A. Young, in the August, 1914, number.

BAUER, J. *Valuation of public service properties.* Pol. Sci. Quart., June, 1915. Pp. 23.

Actual cost versus cost of reproduction as a basis of valuation.

BENNETT, R. J. *Annuities and bond discount.* Journ. Account., June, 1915.

Problems and solutions in annuities. To be concluded.

CORDEAL, E. *Cost accounting in the railroad shop.* Engg. Mag., May, 1915.

Present methods produce no working units by which the cost of repairs can be approximated. Some practical suggestions.

CRAGGS, G. S. *Manufacturing costs.* Accountant, June 5, 1915. Pp. 12.

Fundamental principles upon which cost keeping in theory and practice is based.

CULVER, G. H. *System in the stock department.* Engg. Mag., May, 1915. Discusses principles and shows forms and illustrations.

EDGERTON, H. H., Jr. *The physical valuation of the railways.* Ry. Engg. & Maintenance of Way, May, 1915.

Shows graphic chart of construction cost and also working organization of valuation corps.

FICKER, N. T. *Main divisions of manufacturing expense.* Engg. Mag., July, 1915. Pp. 7.

The definition, composition, and distribution of machine expense and material expense.

FICKER, N. T. *Manufacturing expense distribution*. Engg. Mag., June, 1915.

Opening chapter of a series on the apportionment of manufacturing expense. This chapter establishes the unit of time as the correct basis for distribution.

FISH, E. H. *What constitutes overhead*. Engg. Mag., July, 1915. Pp. 10.

The constituent factors of overhead expense itemized and analyzed using a specific machine-tool factory as an example.

GAINES, M. W. *A billion dollar confiscation*. Ry. Age Gaz., June 4, 1915.

Criticizes requiring railroads to keep formal depreciation reserve for equipment.

GILLETTE, H. P. *Appraisal of "overhead costs."* Elec. Wld., June 3, 1915.

What should and what should not be included under "overhead costs."

GILLETTE, H. P. *The valuation of water-works properties*. Engg. & Con., May, 1915.

First article of a series of twelve. Deals with plant inventory.

GRADY, W. H. *Cost factors in coal production*. Bull. Am. Inst. Min. Engrs., May, 1915.

HANEY, L. H. *Depreciation and valuation for rate making*. Journ. Account., May, 1915. Pp. 7½.

Discusses fallacies.

HILLER, A. *School accounting and costs*. Journ. Account., June, 1915.

Summarizes what has been done. Offers suggestions and criticisms.

HILTON, W. P. *Bonus capital stock and bonds*. Journ. Account., June, 1915.

Explains an actual case in which both bonus capital stock and bonus bonds were issued under a general first mortgage.

HULETT, F. W. *Way records on cost per section basis*. Elec. Ry. Journ., Apr. 3, 1915. Pp. 2.

Proper regulation of maintenance of way accounts of electric railways.

IVES, A. S. *Factors in rate-making*. III. Elec. Wld., Apr. 17, 1915. Pp. 3.

Concluding article. Considerations which govern rates and some new forms of utility schedules.

LAWTON, W. H. *Depreciation accounts*. Elec. Wld., June 26, 1915. Pp. 1½.

Consideration of method. Lack of uniform terminology.

MILLER, K. B. *Valuation of physical properties*. Tel. Engr., May, 1915.

Considers some of the fundamental points.

PEGLER, E. C. *The auditor's duty in relation to stock-in-trade*. Accountant, May 1, 1915. Pp. 7.

Describes methods of verifying stock on hand as shown on the stock sheets. Cites some English legal decisions.

POLAKOV, W. N. *Controlling the cost of electricity*. Engg. Mag., May, 1915.

Statement of common fallacies in judging cost of electric power in private plants and of elements involved in determining output of power actually required.

PURDON, C. D. *The valuation of railroads.* Journ. Assoc. Engg. Soes., Apr., 1915.

TINGLEY, R. H. *Overhead charges in valuation.* Ry. Age Gaz., June 11, 1915.

Suggests method of determining actual costs of overhead charges instead of using arbitrary percentages.

TUCKER, R. H. *An application of cost accounting in rate making.* Journ. Pol. Econ., June, 1915. Pp. 14.

Cites the Minnesota and the Wisconsin express rate cases as a step in the direction of determining rates by the application of cost accounting. Explains methods of calculating actual costs of services performed in Wisconsin case.

Central electric railway accountants. Elec. Ry. Journ., June 19, 1915. Pp. 3½.

Report of meeting held on June 11 and 12. Abstracts of paper on the relation of the accounting and mechanical departments.

Depreciation as an element for consideration in the appraisal of public service properties. Pro. Am. Soc. Civ. Engrs., Apr., 1915.

Continued discussion of paper by C. E. Grunsky.

Elements of railroad value that might be overlooked. Eng. Rec., Apr. 24, 1915.

From bulletin issued by valuation committee of Chicago Hamilton & Dayton Railroad. Lists 62 such items.

Fundamental problems involved in railway valuation. Ry. Age Gaz., June 4, 1915. Pp. 4.

A report of a 3-day conference for the discussion of some of the important problems now confronting the federal work.

Interstate Commerce Commission's uniform system of accounts for Class "C" telephone companies. Journ. Account., May, 1915. Pp. 3.

Objections as set forth in the brief submitted by the Wisconsin Railroad Commission.

Railway Storekeepers' Association convention. Ry. Age Gaz., May, 1915.

Reports on scrap and scrap classification, recommended practices, reclamation work, accounting, piece work.

Public Utilities

(Abstracts by Ralph E. Heilman)

BRADLEE, H. G. *The jitneys and the street railways.* Stone & Webster Pub. Serv. Journ., Apr., 1915.

Permanent establishment of jitney competition must inevitably be followed by a material reduction in the quantity and quality of street railway service.

BURGESS, P. *Points of difference in water works franchises.* Am. City, Apr., 1915.

Discusses various methods of providing in the franchise for rates, quality of service, and extension of service.

HEILMAN, R. E. *Public service commission reports.* Nat. Munic. Rev., Apr., 1915.

Recent reports of public service commissions indicate that rapid progress is being made by the commissions in the development of proper principles of control.

HEILMAN, R. E. *Some economic aspects of water works valuation.* Fire & Water Engg., Apr. 14, 1915.

Treatment of early losses and going concern in valuation of water plants for rate-making purposes.

JACKSON, H. D. *Public versus public service corporations.* Engg. Mag., June, 1915.

Regulation by state commissions must prove ineffective. Proposes the establishment of combined local and state commissions with separate and joint regulative authority.

KING, C. L. *The jitney bus.* Am. City, June, 1915.

What the new method of transportation means to municipal welfare and development. Provisions for regulation necessary.

MORTON, F. M. *Public utility references.* Special Libraries, May, 1915.

List of recent articles on public utility subjects.

MOSES, R. P. *Electric rates.* Am. Munic., May, 1915.

An analysis and discussion of the factors which make up the cost of service.

NASH, L. R. *Some commercial considerations in central station rate making.* Stone & Webster Pub. Serv. Journ., June, 1915.

That system of rates is best, whatever it may be, which for a given net profit will yield a maximum total development of business.

PALM, C. I. *The jitney bus.* Engg. News, May 13, 1915.

Jitneys can not carry passengers for five cents and make a profit.

PRATT, E. A. *Ancient and modern accounting for public utilities.* Fire & Water Engg., Apr. 14, 1915.

Criticises accounting methods prescribed by some of the state commissioners.

ROHN, R. *A problem in making of rates.* Stone & Webster Pub. Serv. Journ., Apr., 1915.

Protests against deducting depreciation from cost value of property in reaching a base upon which a return shall be permitted.

WAGNER, B. M. *The acquisition of private water plants by municipalities.* Journ. Am. Water Works Assoc., Mar., 1915.

Discusses methods of evaluating private plants which are to be taken over by a municipality.

WAGNER, B. M. *Rates for water supply.* Journ. N. E. Water Works Assoc., Mar., 1915.

A review of the development of rate fixing methods for water.

WEBB, S. and B. *State and municipal enterprise*. Special Supplement of New Statesman, May 8, 1915.

Draft report of the committee of the Fabian Research Department on the control of industry.

WENTWORTH, J. W. *Progress in the municipal ownership and operation of ice plants*. Am. City, May, 1915.

Activities of American and German cities in the ownership and operation of ice plants.

WILLIAMS, A. *The case against municipal ownership*. N. Y. Post, Mar. 31, 1915.

Summary of arguments against public ownership of public utilities.

WOOLFOLK, W. G. *Appraisal of public utility properties*. N. Y. Post, Mar. 31, 1915.

Court and public service commission decisions favorable to public utilities. Stone & Webster Pub. Serv. Journ., May, 1915.

Indicates the most important advances made by public utility companies before the commissions and the courts during 1914 and 1915.

The jitney bus vs. the trolley car. Engg. News, May 13, 1915.

The motor bus business should be subjected to municipal regulation.

Jitney figures in two southern cities. Elec. Ry. Journ., May 29, 1915.

Data on number of passengers carried and cost of operation interpreted to prove the absurdity of a 5-cent 4-passenger or 7-passenger car service.

Municipal operation in Pasadena, California. Elec. Wld., May 8, 1915.

Analysis and review of the annual reports of the municipal lighting works department of the city.

Municipal-utility problem at Emporia, Kansas. Elec. Wld., May 1, 1915.

An electric light plant built by private capital, then owned and operated by the city, and now leased to a progressive syndicate.

What the community loses by jitneys. Stone & Webster Pub. Serv. Journ., May, 1915.

Discusses recent report of the Oakland California, Chamber of Commerce report on the jitney bus. If street railways are to continue to furnish long hauls at the 5-cent rate, they must retain their short haul business.

Zone fares in Milwaukee. Elec. Ry. Journ., May 1, 1915.

The zone system of street railway fares in Milwaukee—its effect upon the riding habit, and upon suburban traffic.

Investments

(Abstracts by Arthur S. Dewing)

BARRETT, G. E. *Investments of to-morrow—railroad vs. industrial securities*. Moody's Mag., May, 1915. Pp. 5.

Savings will go more into industrials. The liberal credit facilities of the federal reserve banks will stimulate this movement.

BONAFFON, S. A. *The world a bankrupt*. Moody's Mag., May, 1915. Pp. 3.

Answers question in negative, pointing out that saving propensities are stimulated by war. United States becoming world's creditor nation.

CRISCULO, L. *A study of the list of legal investments issued by the New York state banking department*. Bankers Mag., Apr., 1915.

Adverse criticism of application of the law to certain investments. Suggests, perhaps rightly, official misjudgment of investment values.

HICKERNELL, W. L. *The war and the bond market*. Moody's Mag., Apr., 1915. Pp. 3.

Brief criticism of Patten's contentions that stock prices are being maintained artificially and that there will be a rapid decline in stock prices this summer. Emphasizes the desirability of American investments to citizens of belligerent nations.

HOBSON, C. K. *The war and British foreign investments*. Econ. Journ., June, 1915.

Careful summary of the British balance of trade through March including considerable statistical material. Concludes that inroads on total amount of British foreign investments are thus far but little.

LOREE, L. F. *Our borrowed capital*. Annalist, June 28, 1915.

Digest of President Loree's exhaustive and valuable study of foreign holding of American railway securities.

M'GRATH, D. J. *Investment required per passenger*. Elec. Ry. Journ., May 8, 1915.

An able exposition and defense of using a "per passenger" basis in estimating electric railway investments.

PRINCE, T. *The Missouri, Kansas, and Texas situation*. Moody's Mag., Apr., 1915. Pp. 9.

A very careful, judicious, and painstaking analysis of the financial condition of a railroad from the point of view of investors, especially in railroad short-term notes.

ROBINSON, M. H. *Distribution of securities in the formation of the United States Steel Corporation*. Pol. Sci. Quart., June, 1915.

Most exhaustive analysis thus far made. Some of the footnote sources upon which important figures hinge are open to question; article would have been of greater value had more original sources been used.

ZNAMECKI, A. *How investments pay in Russia*. Americas, May, 1915.

Instructive account with elaborate statistical summaries. Leaves impression that Russian industrial enterprises are very profitable.

Investments under war conditions. Accountant, Apr. 10, 1915.

A criticism of Hobson's theory of geographical distribution of investments.

New blue sky laws. Invest. Bankers Assoc. Bull., June 12, 1915.

Summary of recent legislation and court decisions restricting sales of securities in Arkansas, Iowa, Kansas, South Dakota, West Virginia. The Iowa law in detail in the bulletin for April 28.

Passing a dividend. Annalist, July, 1915. Pp. 5.

A statement of the contemptible manipulation surrounding the gaining of the United States Rubber Company's common stock dividend.

Use of middleman in the bond market. N. Y. Times, Apr. 15, 1915.

Good brief statement of economic services of bankers in placing municipal bonds.

Corporations and Trusts

(Abstracts by Arthur S. Dewing)

CANADIAN CORRESPONDENT. *Object lessons in subsidies (Canada).* Annalist, June 28, 1915.

Analysis of very heavy advances and guaranties made by Dominion government to new railroads.

COTTER, A. *History of the U. S. Steel Corporation.* Moody's Mag., Mar., Apr., May, 1915.

DAVIES, J. E. *Federal Trade Commission.* Wld. Wk., May, 1915.

LIEFMANN, R. *Die amerikanische Trustpolitik und ihre Beurteilung im Lichte der ökonomischen Theorie.* Wirtschafts. Archiv, Apr., 1915.

Effort to judge American conditions in large business according to German economic theories. Shows ignorance of a real understanding of the facts and underlying currents of our economic life.

STEPHENS, G. A. *Recent federal trust legislation.* S. Atlantic Quart., Apr., 1915.

Clayton Act unsatisfactory because of its uncertainty of application. Article accepts Trade Commission, but suggests that it should be a "trained body of public spirited men."

YOUNG, A. A. *The Sherman act and the new anti-trust legislation.* Journ. Pol. Econ., Apr., May, 1915.

I. History of conditions surrounding passage of legislation. Drawing of Clayton act poor; passed because of "administrative pressure, party discipline, the political power of organized labor." Excellent and unbiased analysis of evils of current trust legislation. II. Analysis of anti-trust legislation with respect to (1) exemption of labor unions, (2) holding companies, (3) interlocking directorates, (4) the Trade Commission.

Relevant annotations and an experiment in common sense. Annalist, July 12, 1915. Pp. 35, 38.

Discussion of the new Missouri Pacific reorganization. Valuable because of light thrown on change in railroad reorganization policy.

Labor and Labor Organizations

(Abstracts by David A. McCabe)

ABBOTT, L. *Reminiscences. An industrial revolution.* Outlook, May 26, 1915.

Describes the writer's work for labor legislation and industrial peace.

ANDREWS, J. B. *An industrial commission for the state of New York*. Survey, May 1, 1915. Pp. 2.

Favorable comment on the provisions of the new act.

ATLANTICUS. *Unionism afloat*. Atlantic, July, 1915. Pp. 7.

The British marine unions have not fought strenuously enough for safety regulations.

BABLITZ, A. A. *Historical development of trade unions*. Am. Federationist, May, 1915. Pp. 7.

(Continued from February issue.) Deals with changes in legal status of unions in England in last century.

BARNES, C. B. *Public bureaus of employment*. Ann. Am. Acad., May, 1915. Pp. 9.

Their province, defects, and needs outlined.

BRUEBE, R. *Compensation and business ethics*. Harpers, July, 1915. Pp. 10.
Some results of workmen's compensation acts; favors extension of social insurance.

COOKE, M. L. *Casual and chronic unemployment*. Ann. Am. Acad., May, 1915. Pp. 6.

Is for the most part remediable; lines of advance are suggested.

CREEL, G. *A way to industrial peace*. Century, July, 1915. Pp. 8.

Describes the joint agreement system in operation in the Hart, Schaffner and Marx factory in Chicago.

GARY, E. H. *Unemployment and business*. Harpers, June, 1915. Pp. 3.

The problem is essentially one of business management; the state can not be expected to furnish employment.

GLOCKER, T. W. *Amalgamation of related trades in American unions*. Am. Econ. Rev., Sept., 1915. Pp. 21.

GOMPERS, S. *Fixing wages by law or unionism*. Am. Federationist, May, 1915. Pp. 5.

Favors latter method; a rejoinder to a criticism (here reproduced) by Harris Weinstock of an article in the March issue.

GOMPERS, S. *And yet they would "wish it on us."* Am. Federationist, May, 1915. Pp. 5.

An unfavorable review of recent wage decisions in New South Wales.

HAMILTON, F. H. *Methods of wage payments so as to afford the least inconvenience to employees*. Pro. St. Louis Ry. Club, Mar. 12, 1915.

HAMMOND, M. B. *Wages boards in Australia*. IV. *Social and economic results of wages boards*. Quart. Journ. Econ., May, 1915. Pp. 68.

HATHAWAY, H. K. *Scientific management and the interests of the employee*. Journ. Eng. Soc. of Penn., Mar., 1915.

HENDERSON, C. R. *How Chicago met the unemployment problem of 1915*. Am. Journ. Soc., May, 1915. Pp. 10.

HODGES, H. G. *Statutory provisions for and achievements of public employment bureaus*. Ann. Am. Acad., May, 1915. Pp. 20.

HOWE, F. C. *Unemployment*. Century, Apr., 1915. Pp. 9.

Emphasizes the need of social action and outlines the German methods of dealing with unemployment.

KELLEY, F. *Some objections to the New York Industrial Commission*. Survey, May 1, 1915. P. 1.

KENNEDY, J. M. *Labour and the war*. Fortn. Rev., Apr., 1915. Pp. 12.

Defends the workmen against the charges of shirking and of selfishness in insisting on wage standards.

KENT, R. T. *Labor vs. scientific management*. Ir. Trd. Rev., Mar., 1915.

LIPPMANN, W. *Violence in labor disputes*. Metropolitan, May, 1915.

MLEINEK, C. *Der Einfluss des Krieges auf die Frauenarbeit*. Archiv f. Frauenarbeit, Mar., 1915. Pp. 20.

Appraises the displacement of women from employment, by occupations.

MICOU, R. D. *A federal law protecting government employees*. Engg. News, Apr. 8, 1915. P. 1.

Present law protects against discharge without a hearing but "inefficient clerks are retained through political influence"; the Civil Service Commission should be given jurisdiction over removals and reductions.

MYERS, G. *The real causes of industrial accidents*. Am. Federationist, May, 1915. Pp. 5.

Alcoholism is a relatively insignificant factor; lack of proper safeguards is the real cause.

NEARING, S. *The adequacy of American wages*. Ann. Am. Acad., May, 1915. Pp. 14.

Quotes figures to show that present American wage scale is inadequate.

NEARING, S. *Wages and salaries in organized industries*. Pop. Sci. Mo., May, 1915. Pp. 26.

A presentation of figures by industries.

POST, L. F. *Government intervention in idleness*. Survey, June 19, 1915. Pp. 2.

Describes the work of the Federal Department of Labor in promoting the distribution of labor.

POTHOFF, H. *Der Krieg und die Zukunft des Arbeitsrechtes*. Arbeitsrecht, Dec., 1914. Pp. 8.

Since the outbreak of the war, government has extended its protection of wage-earners. Experience of the war will probably lead to an increase in social protection of workers.

RYAN, J. A. *Fears of the minimum wage*. Survey, May 22, 1915. P. 1.

Holds that the objections of certain trade unionists are groundless.

SANVILLE, F. L. *Social legislation in the keystone state*. Survey, Apr. 10, 1915. Pp. 5.

Criticism of proposed compensation legislation.

SCHNEIDER, G. *Die Arbeitsvermittlung für Kaufleute*. II. Soz. Praxis, Mar. 18, 1915. Pp. 3.

Local and private agencies are inadequate; imperial organization of the service is desirable.

A SKILLED LABORER. *Strikes from the workman's point of view*. Quart. Rev., Apr., 1915. Pp. 22.

Advocates the training up of a class of professional adjusters of labor disputes.

STEWART, M. W. *Some buried "labor laws."* Am. Federationist, June, 1915.

Calls attention to laws in several states, not ordinarily classified as labor laws, giving power to guards employed by private corporations and firms during strikes.

TARBELL, I. M. *Shorter working hours*. American, Apr., 1915.

TAYLOR, A. W. *Minimum wage law in the state of Washington*. Am. Econ. Rev., June, 1915. Pp. 8.

WOOLLEY, H. T. *The issuing of working permits and its bearing on other school problems*. School & Society, May 22, 1915.

Arbitration award in enginemen's wage controversy. Ry. Age Gaz., May 7, 1915. Pp. 4.

An analysis of the award of April 30 in the case of the Western railroads and the engineers and firemen.

Arbitration of the Chicago Street Railway Strike. Survey, June 26, 1915. P. 1.

Bay state arbitration. Elec. Ry. Journ., May 29, 1915. Pp. 3.

The company's case in the Bay State Street Railway Company arbitration.

Chicago's two-day strike. Elec. Ry. Journ., June 19, 1915. Pp. 4.

Account of the recent street car strike and of submission to arbitration.

The municipalities and the unemployed. Canadian Munic. Journ., June, 1915.

The municipalities have been forced to bear the heavy burden of agricultural unemployment caused by the war and have made proposals to Dominion government for action to relieve the situation.

Money, Credit, and Banking

(Abstracts by Don C. Barrett)

BRADY, J. E. *National banks and trust company powers*. Banking Law Journ., Apr., 1915. Pp. 8.

Review of court decisions showing that Congress has the right to confer trust company powers upon national banks.

CONANT, C. A. *The rediscount and acceptance system*. Bankers Mag., Apr., May, 1915. Pp. 7, 7.

Survey of European methods. Variations in policy in England, France, Germany, and Belgium. Federal Reserve Board gives qualified encouragement to system as practiced in Europe. Advantages of

rediscounts contrasted with former methods of financing our foreign trade. Some acceptance paper being created here.

CONWAY, T. *The influence of the federal reserve act upon commercial borrowing.* Ann. Am. Acad., May, 1915. Pp. 10.

Recital of problems which have confronted the board in regard to definition of "commercial paper" and to regulations for borrowing and discounting. Progressive development in scope and detail of regulations is contemplated.

DICKEY, W. P. *My experience with cattle paper.* Bankers Mag., June, 1915.

Appeal to bankers to purchase cattle paper of ranchers endorsed by loan companies.

ECKHARDT, H. M. P. *Canadian banking in 1914.* Bankers' Mag. (London), May, 1915. Pp. 9.

Clearing house authorities, refusing to take advantage of suspension of payments on Dominion notes, have helped to keep bank notes on sound basis. Dividends have not decreased. Contraction of commercial loans by expansion of government loans.

FISHER, I. *Equation of exchange for 1914 and the war.* Am. Econ. Rev., June, 1915. Pp. 6.

GOODHUE, E. W. *Revision of New York state banking law.* Am. Econ. Rev., June, 1915. Pp. 6.

HARING, C. H. *American gold and silver production in the first half of the sixteenth century.* Appendix: *Monetary values in Spanish America.* Quart. Journ. Econ., May, 1915. Pp. 47.

Having access to Spanish colonial state papers in Seville enables writer to correct estimates of Soetbeer and Lexis. Spain as distributor of precious metals.

HOFFMAN, W. *Die Arbeitsteilung zwischen Sparkassen und Depositenkassen.* Zeitschr. f. d. ges. Staatswis., vol. 71, no. 1, 1915. Pp. 45.

Draws ordinary distinction between savings and deposit banks. Interesting historical survey of each with special reference to Germany. Remarkable increase of deposit banking from 1900 to 1910. The turn of the century sees a change in German policy, viz., "concentration of capital through decentralization of business." Threatened introduction of postal savings banks forced existing institutions to united action.

KIES, W. S. *Branch banks and our foreign trade.* Ann. Am. Acad., May, 1915.

England's preëminence as a world financial market due largely to work of "acceptance houses." Education of American investor, the creation of "dollar exchange," and the use of acceptances will bring us South American markets.

KOOF, E. J. *Effect of European war on interest rates.* Trust Companies, Apr., 1915. Pp. 3.

Conditions following wars of past half century, and enormous expenditure on present war, point to high rates following peace and then lowering rates.

LANSBURGH, A. *Die Berliner Grossbanken im Kriegsjahr 1914*. Die Bank, Apr., 1915. Pp. 19.

The conduct of large banks was well ordered. Early assistance received from Reichsbank not duly recognized.

MEYER-WELTI, E. *Die Bankpolitik auf Irrwegen*. Natur und Gesellschaft, June, 1915. Pp. 2.

MORGAN, G. W. *Argument of New York trust companies against extension of fiduciary powers to banks*. Trust Companies, Apr., 1915. Pp. 6.

"Enabling bills" now pending would compel trust companies to "nationalize," paralyzing business and depriving clients of protection under state laws.

NECCO, A. *Il corso dei titoli di borsa in Italia dal 1861 al 1912*. Rif. Soc., Apr., 1915. Supplement. Pp. 152.

A valuable history and discussion. The present volume deals only with the fluctuations of price and yield of government obligations. It is also published in full as a supplement to the *Giornale degli Economisti* for April.

NECCO, A. *I prezzi delle merci in Italia nel 1913*. Rif. Soc., Apr.-May, 1915. Pp. 17.

NICHOLSON, J. S. *The abandonment of the gold standard*. Quart. Rev., Apr., 1915.

The moratorium and inconvertibility are in essence the same. The provision for convertibility of British treasury notes was practically non-effective. Present monetary troubles are ultimately traceable to abandonment of silver as a standard.

PALGRAVE, R. H. I. *The government note issue*. Bankers' Mag. (London), Apr., 1915.

RAFFALOVICH, A. *Les marchés neutres et les belligérants*. Journ. des Econ., May, 1915.

Circumstances which have led to loans to belligerents by American bankers.

ROBINSON, W. M. *Protest of trust companies of Pennsylvania against division of fiduciary powers*. Trust Companies, Apr., 1915. Pp. 5.

Able discussion of objections, based upon court decisions and upon opinion that safe administration of trust estates will be jeopardized.

SLAY, G. J. *Governor Slay explains the clearing plan*. Journ. Am. Bankers Assoc., June, 1915. Pp. 3.

Detailed explanation of system for district no. 5. Shows the natural development of a national clearing house through reserve board.

SPALDING, W. F. *The foreign exchanges and the war*. Journ. Inst. Bankers, June, 1915. Pp. 11.

Discussion of some causes of fluctuations in exchange and some monetary problems arising from war.

SPRAGUE, O. M. W. *The crisis of 1914 in the United States*. Am. Econ. Rev., Sept., 1915. Pp. 35.

TERRONI, B. *Di alcune relazioni fra prezzi presenti i prezzi futuri nel mercato dei prodotti.* Apr., 1915. Pp. 23.

VANDERPOEL, E. *Bearing of the federal reserve act on the city of New York.* Banking Law Journ., June, 1915. Pp. 4.

The inevitable effect of the act will be to enlarge New York as a banking center of international importance.

WILLIS, H. P. *Work of Federal Reserve Board.* Journ. Am. Bankers Assoc., June, 1915. Pp. 4.

Holds difference between Aldrich plan and Federal Reserve Act fundamental. Reasons why new system will prove profitable to country banks and to community. Unification of banking and check clearance especially discussed.

WOLFE, O. H. *Scientific development of the bank check in connection with the federal reserve system.* Trust Companies, Apr., 1915. Pp. 5.

Interesting development of conception that deposits and note issue are essentially the same.

ZOLA, D. *Le crédit au petit commerce et à la petite industrie.* Rev. Sci. Pol., Apr., 1915. Pp. 22.

Analyzes provisions of the law recently enacted in France to provide better facilities for long and short term credits for small merchants and manufacturers. In spite of criticisms, the act has serious merit.

The Australian note issue. Bankers Mag., May, 1915. Pp. 7.

The labor party created a government paper money in order to save interest. Notes held by banks are not in fact redeemable in gold. Repeating experiment of United States in 1862.

Bibliography on agricultural credit. Journ. Am. Bankers Assoc., June, 1915. Presents over 100 titles.

Convention of New Jersey bankers. Banking Law Journ., May, 1915. Pp. 4.

Address of G. H. Kretz on bank acceptances explains advantages and risks of the acceptance as credit instrument.

Currency and finance in Canada. II. Econ. Journ., June, 1915. Pp. 4.

Non-secured Dominion notes have been issued beyond limits set by law.

The gold settlement fund and inter-district clearing of checks. Journ. Am. Bankers Assoc., June, 1915. Pp. 3.

Sets forth the plan for future clearings. Establishment of gold settlement fund at Washington means a central reserve and payments by transfer of credit.

The great crisis. IX. *Financing imports.* X. *Some money market developments.* Bankers Mag. (London), Apr., May, 1915. Pp. 8, 10.

IX. Difficulty in controlling gold supply when New York exchange moved against London. England's imports first gained in February. Has Germany virtually substituted paper for gold? X. Problem of financing imports to England and allies attacked through sales of American securities, refusal to renew American maturities, and a change

in the government's method of issuing treasury bills in order to raise rate in Lombard Street and check flow of gold.

How the war affects practical operations in international exchange. Journ. Am. Bankers Assoc., June, 1915. Pp. 5.

Brief and clear description of measures by which British government through the Bank of England relieved accepting banks from precarious situation induced by war. Work of gold fund committee in New York. Predicts American acceptance market and leadership.

The island of stone money. Econ. Journ., June, 1915. Pp. 3.

Curious illustration of a circulating medium.

The Kansas rural credit law. Am. Bldg. Assoc. News, May, 1915. Pp. 2.

Progress of banking in Great Britain and Ireland during 1914. Nos. 3 and 4. Bankers' Mag. (London), Apr., May, 1915. Pp. 28, 27.

3. Statistical presentation of balance sheets. A few banks still fail to publish accounts, but otherwise 1914 statements are fairly complete. Acceptances fallen off; note circulation increased 11 million. 4. Precise amount of specie in land can not be determined. Statistics for ten years, giving percentages. Great increase in cash relatively to demand liabilities during last 10 years was probably main cause of facility in handling financial troubles of 1914.

The progress of British banking. Commerce Repts., May 29, 1915.

Extracts from the London Statist for May 15.

State rural credit systems are still in an experimental stage. Journ. Am. Bankers Assoc., May, 1915. Pp. 6.

Survey of experiments, especially in Wisconsin, Massachusetts, New York, and Missouri. Extended bibliography.

Indication of trust company rights and state sovereignty. Trust Companies, Apr., 1915. Pp. 5.

Voices opposition to giving such rights to national banks. Preliminary opinion of John G. Johnson on constitutionality of such action.

Les moyens de change et d'arbitrage entre la France et l'étranger. L'Econ. Franç., Apr. 17, 1915. Pp. 2.

Since the United States has become a creditor country, and the small amount of funds coming to Paris as a basis for exchange is in the form of dividends, it would be profitable and patriotic to exchange French government bonds for American securities.

Public Finance

(Abstracts by Charles P. Huse)

ANDRÉADÈS, A. *Les finances de la Grèce.* Journ. des Econ., Apr., May, 1915. Pp. 24, 30.

Traces finances of Greece from establishment of self-government in 1843 to problems of present European war.

BENHAM, R. *The Indian budget.* Bankers' Mag. (London), Apr., 1915. Pp. 6.

A critical discussion of the budget of British India for 1914-1915.

BOYLE, J. E. *Some debt histories of North Dakota cities.* Quart. Journ. Univ. N. Dak., July, 1915. Pp. 4.

Traces growth of debts of four North Dakota cities and points out superiority of serial plan to sinking fund as a method of repayment.

CHASE, H. S. *Concerning uniform international financial statements.* Quart. Pub. Am. Stat. Assoc., Mar., 1915. Pp. 10.

Remarks before American Economic Association and American Statistical Association at Princeton, N. J., December 30, 1914.

CHASE, H. S. *Why should we have a national budget?* Nation's Business, Apr. 15, 1915. Pp. 4.

Address delivered before the National Council of the Chamber of Commerce of United States, February 2, 1915. A budget plan is outlined and illustrated.

DOLGE, W. *Budgets and budget making in small cities.* Pacific Munic., June, 1915. Pp. 4.

EHRLICH, J. W. *The New York state tax department.* Real Estate Mag., Apr., 1915. Pp. 4.

FALKNER, R. P. *Income tax statistics.* Quart. Pub. Am. Stat. Assoc., June, 1915. Pp. 29.

Statistical study based on figures published in the annual report of the commissioner of internal revenue.

FERRIN, A. W. *The significance of recent taxation at Albany.* Moody's Mag., June, 1915. Pp. 4.

Critical account of proposed and actual changes in secured debts tax law.

GESSELL, G. A. *Special assessments for local improvements in Minnesota.* Am. Munic., June, 1915. Pp. 3.

Gives the practice of Minnesota municipalities in the use of the special assessment.

HALL, C. P. *Taxation of abutting property for local improvements in Minnesota.* Pro. League of Minn. Munic., 1914. Pp. 8.

HALL, M. G. *Assessing cost of street improvements.* Am. Munic., May, 1915.

Description of method used in assessing cost of street improvements in two Iowa towns.

JENNINGS, H. J. *Beer and the revenue.* Fortn. Rev., May, 1915. Pp. 13.

Discusses the liquor policies of Lloyd George, especially their relation to the revenues.

LOCKHART, O. C. *Recent developments in taxation in Ohio.* Quart. Journ. Econ., May, 1915. Pp. 42.

A critical study of the tax situation in Ohio, with special attention to the working of laws limiting the tax rate, establishing a state tax commission, and providing for appointed assessors.

LYON, W. H. *Double taxation and intangibles.* I. B. A. of A. Bull., May 22, 1915. Pp. 8.

Double taxation has been due in many cases to failure to distinguish between property and wealth.

NORMAND, J. *Les recettes de l'octroi de Paris pendant l'année 1914 et les premières mois de 1915.* L'Econ. Franç., May 15, 1915. Pp. 2.

An analysis of the octroi receipts at Paris, showing the effect of the war on the various classes of goods.

OAKENFULL, J. C. *Brazilian finances: past, present, and future.* Finan. Rev. Rev., June, 1915. Pp. 10.

A sketch of Brazilian finances from 1822 to the present time, with particular reference to the course of her depreciated currency.

PALGRAVE, R. H. I. *The government note-issue.* Bankers' Mag. (London), Apr., 1915. Pp. 7.

Urges withdrawal of treasury notes at end of war and serious consideration of act of 1844.

POND, O. L. *The taxation of corporations.* Yale Law Journ., Mar., 1915.

Favors separation of state and local revenues, giving the localities, the tax on realty and tangible personalty, and the state tax on corporations.

RAFFALOVICH, A. *L'exposé budgétaire de M. Helfferich.* Journ. des Econ., Apr., 1915. Pp. 10.

Synopsis of the budget speech of the German finance minister, March 10, 1915, with critical comments.

SANDERS, W. *The practice of income-tax relief.* Finan. Rev. Rev., June, 1915.

The war rates of the British income tax have made the customary practice of not informing taxpayers of their rights to exemption particularly vexatious. Gives examples of rights to relief not generally known.

SELIGMAN, I. N. *Taxation.* Mo. Bull. N. Y. Chamber Com., May, 1915. Pp. 3.

Report of the chairman of the committee on state and municipal taxation criticising the Emerson amendment to the inheritance tax laws of New York.

SHERWELL, A. J. *The Russian vodka monopoly.* Contemp. Rev., May, 1915. Pp. 12.

Relates the history and results of the Russian government monopoly on the sale of vodka.

SHORTT, A. *Municipal taxation in relation to speculative land values.* Canadian Munic. Journ., July, 1915. Pp. 2.

Difficulties in municipal finance arising from booms would be diminished by a tax on increase in land value at time of transfer and use of proceeds for capital expenditures.

SWANSON, W. W. *The financial power of the empire.* Queen's Quart., Apr.-May-June, 1915. Pp. 29.

Describes the measures taken by Great Britain to meet the August panic and compares the financial strength of the belligerents. The United States will not succeed in capturing South American trade.

VILLIERS, B. *The war and Austro-German finance.* Contemp. Rev., May, 1915. Pp. 9.

Finds the British financial system far superior to that of Germany and Austria-Hungary because of the income tax and the policy of debt repayment in time of peace.

WARBURG, P. M. *Financial policy for Pan-America.* Bull. Am. Inst. Banking, June, 1915. Pp. 4.

Advises financial independence for the United States and a division of credits for her sister republics in private and public loans.

WILCOX, D. F. *Taxation of public utilities.* San Francisco Munic. Rec., June 3, 1915. Pp. 13.

WILLIAMS, W. M. J. *The inconvenient budget and the financial position.* Contemp. Rev., June, 1915. Pp. 9.

A critical survey of the present financial policies of Great Britain.

WRIGHT, A. *Municipal finance and investments after the war.* Finan. Rev. Rev., June, 1915. Pp. 10.

Higher interest rates and the protests of war-impovertished rate-payers will compel British municipalities to economize after the war.

Comparative analysis of annual appropriations, 1903-1915. Munic. Research, Mar., 1915. Pp. 12.

A useful analysis of annual appropriations of the city of New York from 1903 to 1915, showing annual rate of increase of total budget.

Financial problems of the city of New York. Munic. Research, Mar., 1915. Pp. 12.

Brief consideration of the debt, the increasing expenditures and the sources of revenue of New York City.

List of references on the budget of cities. Special Libraries, Mar., 1915. Pp. 8.

A useful bibliography, compiled under the direction of the Library of Congress.

Loans and taxes. New Statesman, May 8, 1915. Pp. 2.

Advocates meeting the war deficit in Great Britain's income from taxes as far as possible.

The new rate of taxation for secured debts in New York state. Com. & Fin. Chron., May 1, 1915. Pp. 2.

Explains the recent changes in the taxation of secured debts and gives the text of the new law.

New York City's need for a financial program. Munic. Research, Mar., 1915. Pp. 30.

Explains the need of a comprehensive, far-seeing budget plan, and gives concrete examples of such forecasts.

The one hundred million dollar loan and the "pay-as-you-go" agreement. Munic. Research, Mar., 1915. Pp. 13.

An explanatory statement with text of the agreement of September 10, 1914, between the city of New York and the bankers financing this loan.

A short history of the land values movement in Great Britain. Land Values, June, 1915. Pp. 4.

Traces history of single tax movement in Great Britain from the visit of Henry George in 1882 to the present time.

Sir Edward H. Holden, Bart., on German finance. Scottish Bankers Mag., Apr., 1915. Pp. 13.

Address of managing director at annual meeting of London City and Midland Bank, January 29, 1915. Describes measures taken by Germany to increase gold holdings of Reichsbank and to procure credit through the new war-loan, war-credit, and war-aid banks.

Taxation of mortgages on real property. National Real Estate Journ., May, 1915. Pp. 6.

War taxation in Switzerland. Econ. (London), May, 1915. P. 1.

A brief statement of the amendment to the Swiss constitution, imposing special taxes on capital and earned income, to be submitted to popular vote.

Les discussions de la Société d'économie politique de Paris: les finances heléniques pendant et depuis les guerres balkaniques. L'Econ. Franç., Mar. 27, 1915. Pp. 5.

Professor Andréadès traces Greek finances from 1912 to the present. Places the cost to Greece of the Balkan wars at 650,000,000 francs.

La taxation des vins en Angleterre. L'Econ. Franç., May 8, 1915. Pp. 2.

French wine provinces will be injured by imposition of very high war tax proposed by Lloyd George.

Tariffs and Reciprocity

(Abstracts by Henry R. Mussey)

ALBERTI, M. *Gli insegnamenti economici del conflitto europeo.* Giorn. d. Econ., Jan., 1915. Pp. 29.

"Only the complete overturn of our economic system, only the coming to the front, after the war, of socialist-anticapitalist men and ideas, only the repudiation of public debts, up to a certain point, can prevent the continuation, probably on an increasing scale, of protective tariff policies."

EMERY, H. C. *The tariff and the ultimate consumer.* Am. Econ. Rev., Sept., 1915. Pp. 20.

FLAISCHL, P. *Grundzüge der ungarischen Handelspolitik.* Jahrb. Gesetzgebung, 38, 4, 1914. Pp. 40.

Discussion of conditions of Hungarian trade policy and its effects on the tariff development of the dual empire.

RAFFALOVICH, A. *Protectionnisme et marché financier.* Journ. des Econ., Apr., 1915. Pp. 4.

Inferentially opposes British tariff reform because of its effects on the financial market.

MARVIN, W. L. *The new textile alliance plan.* Bull. Nat. Assoc. Wool Mfrs., Apr., 1915.

TAUSSIG, F. W. *Lincoln and the tariff: a sequel.* Quart. Journ. Econ., Feb., 1915. Pp. 3.

A suggestion of a speech of Ingersoll's as the possible source of the Lincoln myth.

Population and Migration

(Abstracts by William B. Bailey)

DUNLOP, B. *The truth about birth and death-rates: a reply to Dr. Brend.* Nineteenth Cent., Apr., 1915.

FISHER, I. *Prolonging life by taking thought and care.* Nation's Business, May 15, 1915. Pp. 2.

Describes the work of the Life Extension Institute and the need for it.

GINI, C. *I fattori demografici delle guerre.* Rif. Soc., Apr.-May, 1915. Pp. 21.

The loss of lives to the older nations, notably France, Belgium and England is more irreparable than that to the younger nations, notably the Slavic.

DE NOUVION, G. *La question de la population.* Journ. des Econ., Mar., 1915. Pp. 24.

One more study of the cause of the stationary population in France with proposals to promote the rate of increase.

ROSENTHAL, M. *Die deutsche und internationale Bewegung für Mutterschutz und Sexualreform.* Blätter f. Vergleich. Rechtswis., Feb.-Mar., 1915.

A brief survey of what has been done in Germany and some other European countries for protection and support of mothers with children.

SILVESTRI, G. *La popolazione della Germania.* Riv. Intern., Apr., 1915. Pp. 25.

SNOW, E. C. *Note on the future population of the self governing population of the British Empire.* Journ. Royal Stat. Soc., May, 1915. Pp. 6.

The author predicts a decrease in the rate of growth, a greater rate of increase for the ages over 45 than for younger ages and a decrease in the proportion of females to males.

SNOW, E. C. *On the magnitude of the population of England and Wales available for emigration (with discussion).* Journ. Royal Stat. Soc., Mar., 1915. Pp. 43.

A study of the number of men and women that would be allowed to emigrate from England and Wales without interfering with industrial efficiency. The author admits that the present war will undoubtedly interfere with his conclusions.

WOLF, J. *Eine neue Untersuchung über den Geburtenrückgang.* Zeitschr. f. Socialwis., Apr., 1915. Pp. 4.

A review of Roesle's *Der Geburtenrückgang*.

La question de la population. L'Econ. Franç., 1915. Pp. 3.

A somewhat hopeful view of future increase of population in France.

Geburten-Rückgang und Geburten-Regelung im Lichte der individuellen und der sozialen Hygiene. Soz. Praxis, Apr. 22, 1915. Pp. 2.

A favorable review of Grotjahn's work bearing the title of this article.

Housing

(Abstracts by James Ford)

ARONOVICI, A. *Housing reform in Italy.* Journ. Am. Inst. Arch., Feb., 1915.

DYSON, H. K. *Reform of building by-laws.* Journ. Inst. Munic. & County Engrs., Mar., 1915. Pp. 6.

EBERSTADT, R. *Grossstädtische Bodenpreise.* Schmollers Jahrb., 39, 2, 1915. Pp. 26.

Relation of land prices to housing in Berlin and Brussels.

FORD, G. B. *The city controlling the development of private property.* Munic. Eng. Journ., May, 1915. Pp. 52.

The use of police power in controlling building heights and areas.

GOODACRE, E. J. *Timber and its relation to the building by-laws.* Journ. Inst. & County Engrs., Dec., 1914. Pp. 12.

IHLDER, J. *War and housing.* Nat. Munic. Rev., Apr., 1915. Pp. 3.

MACARTNEY, W. A. *Municipal housing.* Journ. Inst. Munic. & County Engrs., June, 1915. Pp. 12.

Enquiry into possible economies in Scotch house construction.

MORRIS, P. *Housing and town planning in the Doncaster coal fields.* Journ. Inst. Munic. & County Engrs., Mar., 1915. Pp. 9.

MUELLER, J. *Die Unmöglichkeit eines allgemeinen normalen Leerwohnungssatzes.* Jahrb. f. Nat. Oek., Jan., 1915.

Statistical study of vacancies in six German cities.

SEARLES-WOOD, H. D. *Building by-laws and a court of appeal.* Journ. Inst. Munic. & County Engrs., Jan., 1915. Pp. 5.

WILLIAMS, F. B. *City planning restrictions on private property.* Am. City, June, 1915. Pp. 7.

WILLIAMS, F. B. *Significance of the English town planning act of 1909.* Journ. Am. Inst. Arch., May 15, 1915. Pp. 6.

WILLIAMS, F. B. *Some aspects of city planning administration in Europe.* Journ. Am. Inst. Arch., June, 1915. Pp. 5.

Government aid to housing of working people. Labour Gaz., Apr., 1915. Pp. 4.

Review of U. S. Bureau of Labor Statistics Bulletin No. 158.

Housing conditions among negroes in Harlem, New York City. Bull. Nat. League on Urban Conditions among Negroes, Jan., 1915. Pp. 29.

Covers 1002 apartments. Includes special brief treatment of rentals and vacancies.

Housing in London in 1913. London Munic. Notes, Mar.-Apr., 1915. Pp. 5.

Comments upon the report of the Housing of the Working Classes Committee.

Tenement house number. Buffalo Sanitary Bull., Nov. 30, 1914. Pp. 16.

Insurance and Pensions

(Abstracts by Henry J. Harris)

BLAUVELT, A. *The public insurable interest.* Journ. Pol. Econ., June, 1915.

As an aid in reducing fire waste in United States, recommends adoption of principle that "all insurance shall be optionable as to amount, not exceeding 90 per cent of burnable values, and shall invariably apply from the full value downward."

BRABROOK, E. *On the progress of friendly societies and other provident institutions during the ten years 1904-1914.* Journ. Royal Stat. Soc., May, 1915. Pp. 31.

The several classes of provident institutions have shown an average increase per annum of 12,027,109 pounds sterling in the decade; the post-office savings banks show the largest amount, followed by the industrial and provident societies under the Friendly Societies acts, etc.

CROSS, I. B. *The experience in state compensation insurance in California.* Survey, May 22, 1915. Pp. 2.

The state insurance fund has brought about a reduction of insurance rates and has had an administrative expense cost of only 11 per cent.

DAWSON, M. M. *Workmen's compensation claim reserves.* Pro. Casualty Actuarial & Stat. Soc. Am., Feb. 19, 1915. Pp. 21.

Formulas for the computation of reserves, with comment.

DEVINE, E. T. *Widows' pensions in New York.* Survey, Apr. 3, 1915. P. 1.

New law of state of New York provides a child welfare board in each county. Public and private relief agencies should coöperate in giving fair trial.

DUBLIN, L. I. *Educational activities of Metropolitan Life Insurance Company.* Nat. Assoc. Corp. Schs., June, 1915. Pp. 7.

Describes the plan and scope of the correspondence course in insurance conducted by the company.

FISHER, W. C. *The field of workmen's compensation in the United States.* Am. Econ. Rev., June, 1915. Pp. 54.

FLYNN, B. D. *A method proposed for the calculation of liability and workmen's compensation claim reserves.* Pro. Casualty Actuarial & Stat. Soc. Am., Feb. 19, 1915. Pp. 10.

Proposes that the reserves for claims under policies issued prior to 1913 shall be valued according to the New York law and outlines modifications for the years after 1913.

GRUNER, E. *Beitrag zur Frage eines Versicherungsmonopols.* Zeitschr. f. d. ges. Versicherungswis., May, 1915. Pp. 43.

A review of the arguments for and against state monopoly of life

and fire insurance leads the author to conclude that the benefits of private ownership are so marked that state monopoly must be avoided.

HOFFMAN. *Kriegsfragen der Sozialversicherung*. Zeitschr. f. d. ges. Versicherungswis., May, 1915. Pp. 14.

Suggestions for the administration of the social insurance under the conditions caused by the war.

HUNTER, A. *The medico-actuarial investigation of the mortality of American and Canadian life companies*. Journ. Inst. Actuaries, Apr., 1915. Pp. 7.

Abstract of the contents of volume 5 of the investigation, relating to insured persons with family history of tuberculosis, mortality in the southern states, malarial fever and mortality under joint life policies.

MAGOUN, W. N. *The essential factors in the computation of the cost of workmen's compensation*. Pro. Casualty Actuarial & Stat. Soc. Am., Feb. 19, 1915. Pp. 16.

Urges uniform classification of the factors in compensation and insurance work of the various state bodies, with statement of points to be covered and forms of tabular statements to be used.

MALBY, C. H. *The analysis of life offices expenses*. Journ. Inst. Actuaries, Apr., 1915. Pp. 37.

Distributes the administrative costs of life insurance companies into the groups (1) initial expenses, (2) renewal expenses, (3) claim expenses, (4) investment expenses, and (5) "on cost."

NATHAN, E. J. *Ownership, insurable interest and change in interest*. Am. Underwriter, Apr., 1915. Pp. 9.

Summary of the law and court decisions.

PHELPS, E. B. *More than one in every seven dollars of life insurance companies' assets now invested in policy loans*. Am. Underwriter, Mar., 1915.

The remedy must come through new legislation.

PHELPS, E. B. *Occupational diseases and workmen's compensation statutes*. Am. Underwriter, Apr., 1915. Pp. 7.

The Massachusetts courts have held that an occupational disease is an injury within the meaning of the compensation law. In Michigan the courts have given a contrary ruling.

RUBINOW, I. M. *A standard accident table as a basis for compensation rates*. Quart. Pub. Am. Stat. Assoc., Mar., 1915. Pp. 57.

Table showing the distribution of the various classes of accidents, computed from U. S. and foreign data.

RUBINOW, I. M. *Standards of sickness insurance*. II, III. Journ. Pol. Econ., Apr., May, 1915. Pp. 38, 27.

Benefits should include: (1) sick care, consisting of medical treatment, supplies and institutional care; (2) money benefits of about 66 per cent of wages for 26 weeks; (3) maternity benefits and; (4) funeral benefits. Estimated cost of insurance about 4 per cent.

SANVILLE, F. L. *Social legislation in the Keystone state*. Apr. 10, 1915. Pp. 5.

Proposed compensation legislation of Pennsylvania repeats many of the weak features of early American laws.

SULLIVAN, J. W. and others. *Social insurance in Great Britain*. Survey, May 22, 1915.

Defense and criticism of a recent report of the social insurance department of the National Civic Federation.

WOODWARD, J. H. *Workmen's compensation reserves*. Pro. Casualty Actuarial & Stat. Soc. Am., Feb. 19, 1915. Pp. 18.

Discusses the "retrospective" and "prospective" methods.

Fire insurance experience. Annalist, May 31, 1915. P. 1.

Except for the years 1904 and 1906 when the Baltimore and San Francisco conflagrations occurred, the year 1914 showed the greatest property loss in the history of the country.

Recent literature on social insurance and statistics of industrial accidents.

Pro. Casualty Actuarial & Stat. Soc. Am., Feb. 19, 1915. Pp. 8.

Titles of recent articles and books on the subject.

Widows' pensions. Annalist, Apr. 5, 1915. Pp. 2.

Résumé of the purpose and scope of widows' pension laws.

Workmen's compensation. Am. Labor Legis. Rev., Mar., 1915. Pp. 129.

Issue devoted to discussion of workmen's compensation problems held at meeting of association in Philadelphia, Dec. 28-29, 1914.

Pauperism and Charities

(Abstracts by Frank D. Watson)

KAMPFMEYER, H. *Erwerbs- und Siedlungsfürsorge für die Familien der gefallenen Krieger*. Soz. Praxis, May 13, 1915.

A proposal by the housing inspector of Karlsruhe for the care of families of fallen heroes. Does not believe that any system of pensions to widows and of contributions for the education of children can be worked out which will make it possible for the widows to give up all other means of support.

MATTHEWS, W. H. *Wages from relief fund*. Survey, June 12, 1915.

An interesting account of how the New York Association for Improving the Condition of the Poor provided work during the depression of last winter "at fair wages and under conditions which did not tend to destroy a man's self-respect."

VAILLE, G. *Some social problems of public outdoor relief*. Survey, Apr. 3, 1915.

"Thorough investigation that seeks to discover the real needs and resources, coöperation with all helpful forces individual or organized, and patient, persistent, thoughtful treatment."

NOTES

The twenty-eighth annual meeting of the American Economic Association will be held in Washington, D. C., December 28 to 31, 1914. This will make possible some coöperation with the Second Pan American Scientific Congress, which is to begin its sessions in Washington the same week. The American Historical Association, the American Political Science Association, the American Statistical Association, and the American Sociological Society are also to meet in Washington during the week.

The American Association for Labor Legislation will hold its ninth annual meeting in Washington, D.C., in late December.

The Second National Conference on Universities and Public Service was held in Boston, August 24-27.

The fourth annual convention of the Investment Bankers Association will be held in Denver, September 20-22.

A survey of marketing methods and problems has recently been made under the supervision of Professor E. D. Baker of the Kansas State Agricultural College (Manhattan, Kansas). The survey takes up methods of harvesting and handling the crop on the farm, farm storage, and delivery at the local market.

Dr. Maurice Parmelee has been voted the Squires prize at Columbia University. This prize is awarded quinquennially "to such graduate conducting an original investigation of a sociological character as shall be adjudged most worthy by a committee of award, consisting of the president, the professor of sociology, and one of the professors of political economy. Such award shall be deemed to be a recognition of scientific ability and achievement, as well as an encouragement of research."

The James J. Hill professorship of transportation in the Harvard School of Business Administration has recently been established. The funds for this, amounting to \$125,000, were contributed by railway presidents, bankers, and other friends of Mr. Hill.

The issue of the *Survey* for June 26, 1915, contains (p. 289) an editorial statement in regard to the dropping of Professor Scott Nearing from the faculty of the Wharton School of Commerce and Finance, University of Pennsylvania.

The library of the late Charles A. Conant has been bequeathed to the library of the School of Commerce of New York University.

The annual report of the John Crerar Library (Chicago) for 1914 reports the purchase of a set of the proceedings of the board of arbitration in the controversy between the Eastern railways and the brotherhoods and also a collection of 400 items on rapid transit in Boston.

The Law Reporting Company, 74 Broadway, New York City, announces that it has a few bound sets of the *Proceedings* in the recent arbitration between the Western railways and the Brotherhood of Locomotive Engineers and the Brotherhood of Locomotive Firemen and Enginemen. These sets include testimony, oral argument, briefs and award, amounting to 8065 pages, bound in 9 volumes (price \$10 per volume).

The proceedings of the meeting of the United States League of building associations, which was held at San Francisco, July 27-29, will be promptly published (price 50 cents) and may be obtained from the American Building Association News Co., Cincinnati.

Announcement is made of the preparation of *Diseases of Occupation and Vocational Hygiene*, edited by George M. Kober, professor of hygiene at Georgetown University, and Dr. William C. Hanson, of the Massachusetts State Board of Health.

The Engineering and Commerce Efficiency Society of America has begun the publication of *Engineering & Commerce Reports*. The first number appeared in June (price 20 cents).

In March, 1915, appeared the first number of a quarterly journal for the nationalization of immigrants in America, *The Immigrants in America Review* (93 Madison Ave., New York, \$2). It is not concerned with either restriction or non-restriction, but aims to show that if immigrants are admitted the means of assimilation must be put within their reach.

The first number of the *Archivio Bibliografico Coloniale*, a new Italian quarterly devoted to the publication of documents respecting Italian colonies, appeared in March, 1915. The subscription price is 7 lira per year.

Appointments and Resignations

Dr. T. S. Adams, of the Wisconsin Tax Commission, will take the place of Professor A. S. Johnson at Cornell University for the ensuing year.

Professor Arthur Edward Andersen, of Northwestern University, has been advanced from the rank of assistant professor to that of professor of accounting.

Mr. Charles B. Austin, of the Department of Extension of the University of Texas, had charge of the work in economics and sociology at the University of Indiana during the summer term.

Dr. Roy G. Blakey, recently at Cornell University, has been appointed assistant professor of economics in the University of Minnesota.

Mr. Jesse Bond has been made instructor in economics and political science at the University of Idaho.

Dr. Harry Gunnison Brown, of Yale University, is to enter upon an assistant professorship in the University of Missouri.

Mr. Theodore T. Bullock has been appointed instructor in economics at the University of Nebraska.

Dr. Ernest W. Burgess, of the University of Kansas, has been appointed assistant professor of economics and sociology in Ohio State University.

Mr. Robert A. Campbell has been appointed instructor in public finance at the School of Commerce, Accounts, and Finance of New York University.

Mr. Paul D. Converse, formerly instructor in Washington and Lee University, has been appointed instructor in commerce in the School of Economics, University of Pittsburgh.

Professor Vanderveer Custis has been granted a year's leave of absence from the University of Washington to make a special investigation of certain phases of business organization.

Professor Frederick Shipp Deibler has been advanced from associate professor to professor of economics at Northwestern University.

Dr. Lucile Eaves has resigned her position as associate professor of practical sociology at the University of Nebraska in order to accept work as director of the Research Department of the Women's Educational and Industrial Union of Boston. Miss Eaves will also serve as lecturer in sociology at Simmons College.

Mr. Richard P. Ettinger has been appointed instructor in finance in the School of Commerce, Accounts, and Finance of New York University.

Professor Lee Galloway, of New York University, has been appointed chairman of a committee of the American Fair Trade League to report upon the use of trading stamps and coupons as a method of merchandising, and also chairman of a committee to outline a course of study for salesmen for the National Association of Corporation Schools.

Mr. Enoch B. Goodwin has been appointed assistant professor of economics in New York University.

Miss Olga S. Halsey, formerly assistant in economics at Wellesley College and recently returned from investigations of social insurance in Europe, will continue the work as special investigator with the American Association for Labor Legislation.

Professor M. B. Hammond, of Ohio State University, has completed his term as a member of the Industrial Commission of Ohio and resumes full-time duties at the university in September.

Mr. David Himmelblau has been advanced from instructor to assistant professor of accounting at Northwestern University.

Professor J. H. Hollander has been appointed chairman of the Sub-Section Committee on Finance of the Second Pan American Scientific Congress to be held the latter part of December.

Dean Williard Eugene Hotchkiss, of the School of Commerce of Northwestern University, has been granted leave of absence and will spend the year as acting professor of political science at Leland Stanford University.

Professor Earl Dean Howard, of Northwestern University, has been advanced from assistant professor to professor of economics.

Mr. William M. Hunley, recently adjunct professor of political science at the University of Virginia, has been appointed to the chair of economics at the Virginia Military Institute.

Professor C. C. Huntington, of Ohio State University, is on leave of absence for the year 1915-1916.

Mr. A. C. James has been appointed instructor in economics at the University of Minnesota.

Professor A. S. Johnson, of Cornell University, has been given leave of absence for a year to serve on the staff of the *New Republic*, New York City.

Mr. Montfort Jones has been appointed instructor in finance in the School of Economics, University of Pittsburgh.

Mr. Howard C. Kidd, for the past two years instructor in economics in Western Reserve University, has returned to the University of Pittsburgh as instructor in economics in the School of Economics.

Dr. Susan M. Kingsbury, formerly director of research at the Women's Educational and Industrial Union of Boston and lecturer at Simmons College, is to occupy the newly endowed chair of social economy at Bryn Mawr College.

Mr. Charles LeDeuc has been appointed instructor in business administration at Grinnell College.

Mr. R. J. McFall has been appointed instructor in economics at the University of Minnesota.

Dr. James D. Magee has been promoted from instructor to assistant professor in economics at the University of Cincinnati.

Miss Mary Mallon has been appointed assistant in economics at the University of Cincinnati.

Dr. Harold L. Reed has been appointed instructor in economics at New York University.

Professor E. V. Robinson, professor of economics at the University of Minnesota, has resigned to accept a professorship at Columbia University.

Professor Lester B. Shippee, of the State College of Washington, is to have a year's leave of absence for work at Brown University.

Miss Irene Sylvester has joined the staff of the American Association for Labor Legislation.

Dr. A. J. Todd, professor of sociology in the School of Economics, University of Pittsburgh, has resigned to accept the headship of the department of sociology at the University of Minnesota.

Dr. William O. Weyforth has been appointed instructor in economics in Western Reserve University.

Mr. Edward Wiest has been appointed instructor in economics at the University of Vermont.

Dr. R. M. Woodbury has been appointed instructor in economics in Cornell University.

Dr. Howard Woodhead, formerly of the University of Chicago and later of the Chicago School of Civics and Philanthropy, has been appointed assistant professor of sociology in the School of Economics, University of Pittsburgh.

Charles A. Conant died July 4. For many years Mr. Conant was Washington correspondent of the *New York Journal of Commerce* and he was treasurer of the Morton Trust Co. of New York from 1902 to 1906. He held a responsible position in establishing the monetary and banking system of the Philippines and one of the minor silver coins is popularly known as a Conant in recognition of his services. Among his writing are *History of Modern Banks of Issue* (1897), *Wall Street and the Country* (1904), and *Principles of Money and Banking* (1905).

Dr. Johannes E. Conrad, professor of political economy in the University of Halle, died on April 25, 1915. He was born in 1839 in West Prussia where he conducted a farm until he was about twenty-five, after which he devoted himself to study and travel for several years. He was appointed extraordinary professor of political economy at Halle in 1870, and two years later was made *ordinarius*. Here he remained until his death. Professor Conrad was probably best known as an editor of the *Jahrbücher für Nationaleconomie und Statistik*, of which he was sole or joint editor since 1870, and which had been founded by his father-in-law. He was also joint editor of the six volume *Handwörterbuch der Staatswissenschaften*, and contributed many articles to both these undertakings. From 1877 he edited a "collection of economic and statistical contributions from the economic seminar at Halle," in which probably twenty theses of his American students have appeared. Toward the end of his life he published an outline of political economy in four parts, which has gone through many editions. Aside from his writings Professor Conrad was a recognized expert in price statistics, especially of agricultural products, and assisted in drawing up numerous laws and in the preparation of the German civil code.

E. L. B.

Professor William Smart of Glasgow University died March 19. He was born April 10, 1858, and in early life was a member of an important thread manufacturing firm. This being bought out in 1884 he devoted himself to economics, becoming lecturer both at Queen Margaret's College for women at Glasgow and at University College, Dundee, in 1886. In 1892 he was appointed lecturer in the University of Glasgow, and in 1896 he became the first professor of political economy in that university, in which it may be remembered the subject was taught by Adam Smith and his predecessors and successors from the chair of moral philosophy. Professor Smart's works are well known. Another volume of his *Annals* covering 1821 to 1830 he left nearly completed and also in press a short work entitled *Second Thoughts of an Economist*.

